FILED
3-26-14
04:59 PM

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Concerning Energy Efficiency Rolling Portfolios, Policies, Programs, Evaluation, and Related Issues.	Rulemaking 13-11-005 Filed November 14, 2013

SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) REQUEST FOR FUNDING OF ENERGY EFFICIENCY AND DEMAND RESPONSE INTEGRATED DEMAND SIDE MANAGEMENT PROGRAMS AND BUDGETS FOR 2015

JANET S. COMBS
MONICA GHATTAS

Attorneys for
SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770
Telephone: (626) 302-3623
Facsimile: (626) 302-6693
E-mail: monica.ghattas@sce.com

Dated: **March 26, 2014**

SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) REQUEST FOR FUNDING OF ENERGY EFFICIENCY PROGRAMS AND BUDGETS FOR 2015

TABLE OF CONTENTS

TABLE OF CONTENTS (CONTINUED)

TABLE OF CONTENTS (CONTINUED)

TABLE OF CONTENTS (CONTINUED)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE

STATE OF CALIFORNIA

Order Instituting Rulemaking Concerning Energy Efficiency Rolling Portfolios, Policies, Programs, Evaluation, and Related Issues.	Rulemaking13-11-005 Filed November 14, 2013

SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) REQUEST FOR FUNDING OF ENERGY EFFICIENCY AND DEMAND RESPONSE INTEGRATED DEMAND SIDE MANAGEMENT PROGRAMS FOR 2015

I.

INTRODUCTION

In this request and supporting appendices, Southern California Edison Company (SCE) seeks funding for its proposed 2015 energy efficiency (EE) programs and 2015 demand response (DR) integrated demand side management (IDSM) programs (collectively referred to as SCE's Proposal). SCE's Proposal is submitted pursuant to and in accordance with the California Public Utilities Commission's (Commission or CPUC) Order Instituting Rulemaking Concerning Energy Efficiency Rolling Portfolios, Policies, Programs, Evaluation, and Related Issues (R.13-11-005 or OIR), issued November 14, 2013; the Assigned Commissioner's Ruling and Scoping Memorandum Regarding 2015 Portfolios (Scoping Memo), issued January 22, 2014; the Assigned Commissioner's Ruling Amending Scoping Memorandum, and Providing Guidance on Energy Savings Goals for Program Year 2015 (Amended Scoping Memo), issued March 3, 2014; and underlying Commission and State policies, laws, and regulations. SCE's Proposal

requests a total of $360.5 million, including $348.8 million for the 2015 EE program budget and $11.7 million for the 2015 DR IDSM activities.

As directed by the Scoping Memo and Amended Scoping Memo, SCE's Proposal largely extends its current 2013-2014 EE and DR IDSM programs and budgets, while making select modifications to capture "harder-to-reach" savings, meet new Commission and state policy directives, and reach the 2015 savings goals without significantly increasing the overall program budget. Specifically, per Commission guidance, key programmatic changes have been made to:

1. Cost-effectively achieve the 2015 EE goals;
2. Mitigate the loss of San Onofre Nuclear Generating Station (SONGS) and the anticipated retirement of existing once-through cooling generators by targeting EE programs to specific locations;
3. Support new EE activities being pursued with Proposition 39 (Prop 39) funds; and
4. Improve the Energy Upgrade California (EUC) Home Upgrade Program (HUP).

SCE also recommends several policy changes to support EE program activities in 2015 and beyond. Specifically, SCE requests the Commission:

1. Provide SCE flexibility in meeting goals by incorporating the streetlight goal into the overall goal, while still reporting on streetlighting progress (Section III. E.);
2. Adjust policies and practices related to early retirement measures and measure useful life assumptions to support locationally targeted activities in 2015, including:
    a. Develop clear, written guidelines that provide a method for assessing information in order to determine "preponderance of evidence" claims consistent with legal definitions so that custom projects that help with load reduction are not unduly prevented (Section IV. B. 1);
    b. Publically post and "freeze" approved Industry Standard Practice (ISP) studies impacting J-S region at the beginning of each program year (Section IV. B. 2);

c. Provide a mechanism for the IOUs to propose measure specific RULs that could be used in place of the default Database for EE Resources (DEER) assumption (Section IV. B. 3); and

d. Remove the 20-year measure life cap (or increase it to 30 years) and allow the IOUs to provide evidence of longer lives for applicable deemed and custom measures (Section IV. B. 4).

3. Allow for expedited custom project review for Prop 39 projects (Section V. D.);
4. Explicitly confirm IOU attribution of energy savings for Prop 39 projects (Section V. E.); and
5. Treat 2015 as an extension of the 2013-2014 program cycle (Section IX. A.).

Detail on these program and policy changes is included below.

II.

SCE REQUESTS $348.8 MILLION IN EE FUNDING TO ACHIEVE 1,072 GWH SAVINGS AND 200.6 MW DEMAND REDUCTION IN 2015

SCE's Proposal will generate 1,072 gigawatt hours (GWh) of gross annualized savings, 200.6 megawatts (MW) of gross peak demand reduction, and $625 million in net resource benefits for SCE ratepayers. SCE requests the Commission approve SCE's proposed 2015 budget authorization of $348.8 million.[1] SCE's Proposal will cost-effectively meet or exceed the established 2015 EE goals, with a projected Total Resource Cost of 1.37 and a projected Program Administrator Cost of 1.84. See the following Appendices for detailed information on SCE's proposed 2015 budgets and energy savings, peak demand reduction, and cost-effectiveness projections. Appendices include:

Appendix A: 2015 Budget Request Summary Tables

---

[1] This authorization request includes the request of the total 2015 Regional Energy Network (REN) request of $25.5 million. At this time, SCE has no opinion on the RENs proposed 2015 EE budget.

Appendix B: 2015 Budget and Savings Placemat Tables

Appendix C: 2015 Savings Allocation and Funding Sources Detail

Appendix D: 2015 Portfolio Cost-Effectiveness Analysis

Appendix E: 2015 Workpaper Adjustment Factors & Proposed Workpaper

Appendix F: 2015 Federal Government & Military IDSM Partnership Program Implementation Plan

III.

SCE WILL COST-EFFECTIVELY ACHIEVE 2015 EE GOALS BY MAKING ADJUSTMENTS TO ITS PORTFOLIO TO ADDRESS MARKET CHANGES

The Amended Scoping Memo provides Investor Owned Utility (IOU) EE goals for 2015, which reflect a 6% increase in SCE's GWh goals, and a 10% decrease in SCE's MW goals as compared to 2014.[2] In 2015, EE goals will be more challenging and costly to achieve due to the: (1) implementation on July 1, 2014 of California's 2013 Building Energy Standards (Title 24 Part 6), which are roughly 25% more energy efficient than the previous standards for residential construction, and roughly 30% more energy efficient for nonresidential construction;[3] (2) potential implementation of additional California Appliance Efficiency Standards (Title 20), particularly in the areas of lighting, consumer electronics, pools, and spas;[4] (3) implementation of federal standards, particularly for central air conditioners, heat pumps, and refrigeration;[5] and (4) customer's EE upgrade activities being increasingly considered standard practice and thus

---

2 Percentage changes reflect SCE's total goals, including Codes & Standards and streetlighting.

3 *See* http://www.energy.ca.gov/releases/2012_releases/2012-05-31_energy_commission_approves_more_efficient_buildings_nr.html

4 Dependent upon the California Energy Commission's rulemaking schedule and the final adoption date; *see also* http://www.energy.ca.gov/appliances/2014rulemaking/documents/index.html.

5 The impact due to federal central air conditioner and heat pump standards will depend upon how the 18-month "grace period" for units manufactured prior to January 1, 2015 will be addressed during Program implementation. *See also* http://www1.eere.energy.gov/buildings/appliance_standards/product.aspx/productid/75 ; http://www1.eere.energy.gov/buildings/appliance_standards/product.aspx/productid/52

ineligible for program participation. These modifications generally reduce the amount of savings the IOUs can claim for EE retrofits, and require customers to undertake more aggressive, comprehensive and costly projects to qualify for IOU incentives.

SCE is proposing adjustments in the 2015 portfolio to address market challenges and meet the Commission-set 2015 goals, without significantly increasing 2014 budget levels. To do so, SCE proposes to increasingly emphasize cost-effective measures and approaches. For example, SCE's 2015 proposal boosts the emphasis on LED lighting and the midstream commercial lighting program, as this market is maturing and costs are decreasing in this area. SCE is also exploring the use of low touch/no touch audits, as described herein, which significantly reduces audit costs. Due to changes in code effective July 2014,which significantly reduce claimable energy savings for smaller customers, SCE is also expanding the reach of the Commercial Direct Install Program to increasingly target medium-sized customers (up to 499 kW) with limited measures such as high bay lighting. These and other modifications support SCE's cost-effective achievement of goals despite code changes and other cost-effectiveness challenges.

SCE also proposes continued and modified activities to support water-energy activities, federal government customers, third party programs, and other key sectors, as well as discontinuing select programs that are no longer cost-effective.

A. SCE Proposes to Support Water Conservation through Continuing and Expanding its Energy-Water Savings Efforts in 2015

In response to the current drought in California, as well as interest both in the Governor's office and at the Commission,[6] SCE is expanding its focus on water-energy savings solutions.

---

[6] The Governor's office issued of Emergency Drought Legislation (apportioning $687.4 million to support drought relief in California) on February 19, 2014, and the California Public Utilities Commission issued a decision granting Office of Ratepayer Advocates' Petition (P.) 13-05-008 and opened Rulemaking for Water-Energy Nexus activities.

Water consumption and energy use are inextricably linked. However, because electric utilities cannot claim embedded cold-water savings (and electric water heating represents a small percentage of SCE customers), SCE is focusing on direct energy savings efforts with ancillary water savings benefits. As California continues to work through the drought, SCE is committed to leveraging and quantifying as much energy and water savings as possible, and SCE looks forward to working with the CPUC on the new water proceeding[7] to finalize important components of the water-energy nexus to encourage and support water savings.

In 2015, SCE plans to continue and expand water-energy saving programs. This includes continuing support for water pumping and treatment measures. SCE also plans to make the following innovative program enhancements:

- Expand SCE's Leak Loss Detection program and Retro-commissioning (RCx) to include water and irrigation districts, agencies and companies;
- Plan to continue and potentially expand the IDEEA365 Water Infrastructure and System Efficiency (WISE) Program launched in 2014;
- Leverage Heating, Ventilation, and Air Conditioning (HVAC) solutions, Marketing, Education and Outreach (ME&O) efforts, and Automated DR (ADR) to water-related customers; and
- Conduct a new 2015 IDEEA 365 solicitation seeking water-focused EE solutions.

1. Expand Leak Loss Detection Program to Target Water and Irrigation Districts, Agencies, and Companies

Considerable energy is required to obtain, treat, and distribute water supplies to end-use customers. Most water agencies in California do not proactively manage leakage, rather react to discovered leaks. Programs offering leak detection services could

---

7 CPUC Rulemaking R.13-12-011.

generate large net water savings impacts.[8] As such, SCE's Leak Loss Detection program will be expanded from targeting Local Government Partnerships to include water districts, water agencies, irrigation districts, privately owned water companies, and investor owned water companies that are currently not part of SCE's Government and Institutional Partnership program. This will make the Leak Loss Detection program available to more customers for energy and water savings in SCE's territory.[9] The Leak Loss Detection program will also leverage services available through RCx, making this service available to an expanded customer base.

2. Continue the IDEEA365 Water Infrastructure and System Efficiency Program to Provide Water Solutions throughout SCE's Territory

The WISE program will leverage data from the Pump Efficiency Services Program (a successful SCE water-energy program that produces significant water and energy savings) as a baseline for the new pump measures. WISE will target water-energy solutions at all major areas of water (e.g., source water pumping, water treatment, water distribution, and waste water treatment) in SCE's service territory.[10] WISE will also look at benchmarking opportunities, audit functions, and installation, focusing on measures such as pump efficiency, and pump repair for customers not covered through SCE's Government and Institutional Partnership program.

---

8 Research indicates 0.87 million acre-feet of water is lost each year through leaking water distribution pipes in California, of which one-third may be economically recoverable. "Embedded Energy in Water Pilot Programs Impact Evaluation," p. ix, March 9, 2011, ECONorthwest.

9 The CPUC is currently determining the methodology for calculating embedded energy savings in water, and will not complete the study until November 2014. A decision is anticipated in April 2015.

10 Market potential: 5% of SCE's load is consumed by the distribution and treatment of water according to the CPUC. At 10% energy savings, market potential = 400,000,000 kWh.

3. Leverage HVAC Solutions, ME&O, and Automated Demand Response Options to Target Available Water Savings

There are a handful of HVAC solutions that may help save both water and energy, such as: (1) replacing cooling towers in central plants in large buildings; (2) expanding the Quality Maintenance program for HVAC package units to include central plants with cooling towers; and (3) using emerging technologies solutions that would replace cooling tower water with chemical desiccant. SCE plans to leverage these programs to emphasize potential water savings.

SCE also plans to reach out to the Association of California Water Agencies (ACWA) and the Save Our Water campaign, to enhance ME&O and increase water and energy savings through co-marketing efforts. SCE can direct existing customers to these resources to help customers partner with local water agencies and gain better access to resources and programs available from the agencies.

Finally, while not directly linked to water savings, SCE will collaborate with water customers to ensure they are leveraging any and all IDSM tools available to them, to help mitigate the extraordinary effort and cost water agencies will incur in response to the drought. To do so, SCE will target outreach related to ADR to fresh and waste water treatment plants, and will assist those plants with an ADR device in modifying their behavior to reduce energy usage when a DR event is called. As a result, these large customers will use less energy and reduce their operational costs, enabling them to utilize conserved resources in their drought mitigation efforts.

4. Conduct a 2015 IDEEA 365 Solicitation Seeking Water-Focused EE Solutions

In addition to continuing the WISE program already selected through the IDEEA 365 program during the 2013-2014 cycle, SCE will conduct a new 2015 solicitation through the IDEEA 365 program to specifically target water-focused EE solutions.

B. SCE Proposes to Expand the Institutional Partnership Program to include a Federal Government and Military Partnership

The federal government and its military sector represent a critical customer segment in SCE's service territory, not only as one of the largest bundled or direct access customer groups, but also as a critical service agency employing many support industries and employees in the region. With continued budget constraints, base closure threats, shifts in funding and base utilization, and federal mandates to reduce energy usage while meeting important national defense and security objectives, military facilities, and federal customers more generally, are facing numerous challenges, including high energy expenses. Major federal government accounts in SCE's service territory consume over 750 GWh per year, with a combined maximum demand of approximately 170 MW. To capture this potential, SCE has increasingly collaborated with military and other federal government customers to provide education, outreach, and IDSM audits to government facilities; conducted several events on military bases to build awareness of EE and DR; and completed audits at over 100 federal government buildings, which identified substantial, uncaptured energy savings.

In 2015, SCE proposes to formalize this work through an Institutional Partnership, which would provide incentives, deeper technical assistance, and professional services to more comprehensively support federal military and civilian facilities and overcome barriers to converting audits to completed EE and DR projects. The Partnership will pursue all potential opportunities at federal facilities including military housing (barrack) retrofits. It will encourage IDSM, including promotion and integration with DR, distributed generation (DG), and energy storage, where applicable.

See Appendix F for the Federal Government & Military IDSM Management Partnership Program Implementation Plan (PIP) for additional information, including budget, energy savings forecasts, and proposed program details.

C. SCE Proposes to Expand the Nonresidential Energy Advisor Program to Include a Behavioral Component

In 2013-2014, pursuant to the Commission's direction to reach 5% of residential customers with a behavioral program,[11] SCE expanded several of its residential programs (e.g., Residential Energy Advisor Program) to include behavioral offerings. SCE plans to continue expanding behavioral offerings in 2015. The 2013-2014 Decision also directs the IOUs to work with stakeholders to expand the definition of behavioral programs and pursue new activities in this area, which SCE and the other IOUs have actively pursued during 2013-2014.[12] Finally, earlier Commission direction addressed the application of behavioral programs to the nonresidential sector, clarifying that behavioral approaches can be applicable to nonresidential markets.[13]

In response to this Commission direction to expand behavioral offerings, SCE proposes to include a nonresidential behavioral component in 2015 portfolio. This new activity will be offered through the statewide Commercial, Industrial, and Agriculture Programs (Energy Advisor sub-programs), and will provide small commercial customers with targeted information on their energy usage as compared to other nonresidential customers with similar facilities. This expansion into the nonresidential sector will enable SCE to provide useful comparative usage data to small commercial customers to encourage IDSM actions such as audits and retrofits.

---

[11] D.12-11-015, p. 76.

[12] D.12-11-015, pp. 76-77: "For purposes of 2013 and 2014, the minimum definition of behavioral programs in D.10-04-029 is maintained such that all behavioral programs are required to employ comparative energy usage and disclosure, ex post measurement, and experimental design. We also maintain the 5% target for residential households by 2014, as required by D.12-05-015, as it applies to this existing definition of behavioral programs. However, we also encourage the utilities to work with Opower, EHC, and other interested parties to initiate a process for expansion of the definition of behavioral programs as well as initiating additional program activities in this cycle. Nothing prohibits the utilities from going beyond this minimum level and definition. If there is consensus on additional types of activities in the behavioral area that would be beneficial, the utilities may initiate them as soon as possible utilizing the program and administrative flexibility they have already been granted and/or they may seek specific authority from the Commission, if necessary."

[13] D.10-04-029, p. 37 "We understand that certain non-residential market sectors may offer opportunities for comparable or greater savings under similar programs, and thus do not restrict our definition to residential applications."

SCE proposes to target approximately 25,000 nonresidential customer service accounts in 2015, with an emphasis on K-12 and California Community Colleges in support of Prop 39, and businesses in the region served by the Johanna Santiago substations.[14]

D. SCE Proposes to Continue to Streamline the Multifamily EE Program to More Effectively Engage Both Owners and Tenants of All Affordabilities

In 2015, SCE will further efforts to streamline the Multifamily EE Rebate (MFEER) program with income qualified programs such as the Middle Income Direct Install (MIDI) program and the Energy Savings Assistance (ESA) program to better serve the entire multifamily market. EE efforts in the multifamily segment must include the property owner and the rental tenant, as well as support the span of affordability (i.e., market rate, affordable, low income). Although public housing continues to be eligible to participate in MFEER, in 2015 SCE will target housing authorities, such as Housing and Urban Development (HUD), and local public housing agencies to maximize energy savings potential to property owners offering lower rent to lower income tenants. SCE will explore implementing a "one stop shop" approach that would enable single source contractors to implement measures and provide services on behalf of the programs noted above.

SCE will also continue to use a single point of contact (SPOC) to more efficiently and effectively onboard the variety of multifamily customers into the multifamily offerings that straddle both the EE and income qualified program offerings. The SPOC will engage property owners and managers to assist in the evaluation of their specific properties and develop tailored solutions that leverage all applicable utility programs, including the engagement of income qualified tenants into the MIDI or ESA program as appropriate. In 2015, the SCE multifamily engagement strategy will incorporate ENERGY STAR® Portfolio Manager to help property

---

[14] This region was identified based on numerous factors related to the loss of SONGS and the anticipated retirement of existing once-through cooling generators. *See* Section IV for more information.

owners benchmark their buildings. Benchmarking will be used to educate property owners on their energy usage, identify EE opportunities, and help owners effectively allocate funds across their portfolio for EE improvements. This integrated approach educates building owners on the benefits of EE and conservation, while combining market-rate and income-qualified EE measures (including both dwelling and common area measures) benefits to both multifamily property owners and tenants.

E. SCE Recommends Flexibility in Meeting Goals by Incorporating the Streetlight Goal into the Overall Goal While Still Reporting on Streetlighting Progress

The Commission typically establishes IOU goals at the portfolio level so the IOUs can make EE programs as cost-effective, efficient, and effective as possible. This approach allows IOUs the flexibility to deploy budgets and other resources as needed to achieve the overall goal, while also achieving more prescriptive programmatic and policy goals. The Commission can adopt such overall goals and still track the IOUs' efforts to address distinct policy objectives such as streetlighting through regular reporting. The Amended Scoping Memo includes a distinct goal of 3.5 GWh for non-IOU-owned street lighting.[15] SCE anticipates its Proposal will achieve these savings through its Local Government Partnerships' streetlighting work. In addition, SCE is developing an updated tariff that will allow local governments to pay for EE improvements to IOU-owned streetlight systems over time, consistent with AB719 and the Amended Scoping Memo. However, in order to continue to give IOUs the flexibility they need to meet Commission goals, SCE requests the Commission include the streetlighting goal in the overall 2015 goal for the IOUs' EE programs. This would result in a total 2015 goal of 983 GWh and 160.1 MW for SCE (including Codes and Standards, streetlighting, and EE program goals).

---

[15] "Assigned Commissioner's Ruling Amending Scoping Memorandum, And Providing Guidance On Energy Savings Goals For Program Year 2015", March 3, 2014, Figure 1, pp. 2-3.

F. SCE Proposes Limited Increases to Incentives within the Plug Load Appliance Program to Support Increased Participation in the Johanna-Santiago Region

SCE proposes the following limited increases to 2015 incentives, primarily to support specific locational needs as described below. Additional incentive changes may be considered as code changes and other modifications impact the portfolio. All incentive changes will be updated in PIP addenda per the established process, and/or filed through an advice letter, if required. Proposed incentive changes are within the Plug Load and Appliances program including:

1. Appliance Recycling Program (ARP): In addition to continuing to offer the $50 ARP incentive to all customers, SCE will offer an increased $75 incentive as part of select marketing campaigns targeting customers in the Johanna-Santiago (J-S) region.[16]
2. Home Energy Efficiency Rebate (HEER) Program: In addition to continuing to offer the $200 rebate for variable speed pool pumps to all customers, SCE will offer an increased $300 incentive as part of select marketing campaigns targeting customers in the J-S region.

In addition to supporting specific locational needs, these incentive modifications respond to recommendations from a recent Evaluation Measurement and Verification (EM&V) ARP Process Evaluation.[17] The evaluation found that customers are likely to respond to a moderately higher incentive, and recommended that SCE test a higher incentive on a temporary basis to assess the effect on participation and cost-effectiveness. Offering higher incentives in targeted areas will enable SCE to explore whether or not moderately higher incentives will effectively motivate customers to participate.

---

[16] This region was identified based on numerous factors related to the loss of SONGS and the anticipated retirement of existing once-through cooling generators. *See* Section IV for more information.

[17] Source: CADMUS, 2013, Appliance Recycling Program Process Evaluation and Market Characterization Study Report, CADMUS.

In addition, see discussion on Prop 39 for a minor proposed modification to the Schools Energy Efficiency Program (SEEP) incentive.

G. SCE Proposes to Modify or Discontinue Programs that are No Longer Cost-Effective or Efficient

Changes in code and other factors such as market saturation will make certain programs inefficient or non-cost-effective in 2015. Specifically, SCE proposes to:

1. Discontinue the Refinery Energy Efficiency Program (REEP)

REEP provides audits, technical assistance, and incentives to support installation of recommended EE equipment for petroleum refining and oil-producing industries. Given changes in claimable energy savings due to Title 24 updates and changes in Industry Standard Practice (ISP) assumptions for measures such as compressed air systems, power recovery turbines, and variable speed drives, the eligible measures for REEP have been drastically reduced. As such, SCE will ramp down the program in 2014 and proposes to discontinue it in 2015. Existing refinery customers will be served by the Comprehensive Petroleum Program.

2. Discontinue the EE for Entertainment Centers Program

The 2013-2014 EE for Entertainment Centers program provides audits, limited technical assistance, and direct installation of low cost/no cost measures to facilities such as movie theaters, bowling alleys, exercise/recreation centers, and restaurants. Title 24 code changes will make this program costly and non-cost-effective, as only a small fraction of energy savings will be claimable for the measures found in most entertainment centers, such as demand control ventilation, economizer repair, and lighting measures associated with entertainment venues. SCE proposes to discontinue the Entertainment Centers Program and serve the market through the existing Commercial EE Program.

3. Modify Commercial Direct Install Program to Increasingly Target Medium-Sized Customers

The Commercial Direct Install program provides small and medium commercial customers with free and low-cost installation of EE measures, in a staged delivery approach, that offers program services in specific geographic areas at different times allowing for a more concentrated, directed program. While the 2013-2014 program focused primarily on customers with a demand of under 200 kW, in 2015 SCE plans to increasingly target medium sized customers (up to 499 kW) with limited measures through Direct Install, because Title 24 code changes will significantly reduce claimable energy savings for smaller customers.

H. SCE Proposes to Continue Third Party Program Opportunities

With the exception of the two third party programs noted above, SCE proposes to continue all other 2013-2014 third party programs, which support the EE marketplace, augment SCE's overall portfolio, and serve a variety of customer segments and needs. SCE also proposes to continue the IDEEA 365 program, which allows bidders to submit proposals for innovative EE programs through the majority of the year. Similarly, SCE proposes extending the Technologies Resource Innovation program (TRIP), a sub-program of the statewide Emerging Technologies program. TRIP will solicit ideas for new technologies in 2015. This sub-program's budget and energy savings will be reported through the Statewide Emerging Technologies Program. Proposed 2015 budgets and energy savings for all third party programs are included in Appendix B.

I. SCE Proposes to Continue Local Government Partnership Strategic Plan Pilots

In 2013-2014, SCE continued its approved Local Government Partnership Strategic Plan pilot, which implements innovative local government strategic plan pilots, based on the Strategic Plan Menu approved in 2010. The 2013-2014 program included a new solicitation of city,

county, and regional governments in 2013. Currently, local governments are in various stages of completion of their selected tasks. In 2015, SCE proposes to use previously authorized 2013-2014 funds to complete outstanding tasks, and seeks limited funding for administrative costs to oversee completion of the existing pilots. SCE does not request additional funds for new solicitations in 2015. See Appendix B for proposed budget information.

IV.

TARGETING EE TO MEET SPECIFIC LOCATIONS' NEEDS

The Commission, IOUs, and other stakeholders recognize locationally targeted EE may advance state and utility goals that have not traditionally been a focus of EE programs, such as improving grid reliability in areas of greatest need. To date, EE programs have been designed to capture all cost-effective energy savings and meet a variety of EE-related policy goals. Procurement of preferred resources to meet reliability needs must take into consideration location, timing, duration, and effectiveness of energy savings, load reductions, clean DG, and energy storage.

To better understand the role of EE in meeting reliability needs, SCE is leveraging information from the Long-Term Procurement Planning (LTPP) proceeding,[18] as well as internal assessments identifying high priority locations from a grid reliability perspective, to inform locationally targeted EE activities. These new activities will help stakeholders better quantify and assess the role of EE to meet capacity needs, offset load growth, defer capital investments, and improve overall reliability. Ensuring grid reliability, stability, and resiliency will require numerous changes to how preferred resources, including EE, are planned, procured, operated, and monitored for performance. Considerations include how to measure grid level impacts of preferred resources (e.g., establish baselines by which to measure savings); coordinate, leverage, and enhance current program offerings; and test and demonstrate new market strategies.

---

[18] R.12-03-014.

SCE has identified the region served by the Johanna-Santiago substations (J-S region) as a high priority location for ramping up EE and other preferred resources to manage load growth. This region was identified based on numerous factors related to the loss of SONGS and the anticipated retirement of existing once-through cooling generators.[19] While SCE plans to focus its locationally targeted activities in 2014 and 2015 in the J-S region, SCE will also continue to assess locational needs across its service territory so that EE efforts are properly prioritized.

As described in the subsections below, SCE:

- Proposes to leverage the existing portfolio by amplifying existing program activities in the J-S region; and
- Recommends the Commission modify various policies and practices related to early retirement measures and measure useful life assumptions to support activities in the J-S region.

SCE looks forward to working with the Commission and stakeholders to develop and implement innovative measures and approaches to meet reliability needs with EE and other preferred resources.

A. SCE Proposes to Expand and Refine Existing Program Activities in the J-S Region in 2015

In 2014, as part of SCE's Preferred Resources Pilot (PRP),[20] SCE began leveraging the existing EE portfolio to meet forecasted capacity needs by amplifying select program activities in the region. SCE plans to continue this locationally targeted work, learn from activities throughout the year, and refine and expand targeted activities throughout 2015. Because peak demand in the J-S region is driven by commercial office buildings, SCE is currently focusing on commercial HVAC and lighting opportunities in the region, including offering direct install

---

19 Track 4 Testimony of Southern California Edison Company, R.12-03-014, pp. 49-54.

20 The Preferred Resources Pilot (PRP) is focused solely on the J-S region. For a description of the PRP, *see* R.12-03-014, Track 4 Testimony of Southern California Edison, pp.49-54.

measures to an expanded customer base, engaging lighting distributors, evaluating commercial HVAC early retirement efforts, and increasing marketing and outreach. Although the residential sector is not a driver of peak demand, there are a significant number of residential customers in the J-S area. Therefore, SCE proposes to increase plug load appliance incentives, appliance recycling incentives, target pool pump replacement efforts, emphasize the Multi-Family EE program, and shift lighting recycling events to the region.

SCE is also reviewing unique opportunities to integrate and bundle products, such as leveraging customer touch points to deliver multiple program offerings (e.g., deliver efficient lighting and HVAC offerings coincidentally) and exploring the role of a preferred resources "integrator" to increase participation and savings. The "integrator" would be a turn-key project management service that could work with customers to integrate preferred resources (e.g., EE, DR, and DG), leverage program offerings, and secure additional financing, as needed. SCE will also continue to review and move forward with opportunities to apply other programs, such as the Proposition 39-related activities (see Section V) and Codes and Standards Compliance Improvements subprogram, to the J-S region.

B. SCE Recommends the Commission Adjust Policies and Practices Related to Early Retirement Measures and Measure Useful Life Assumptions to Support J-S Region Activities in 2015

In addition to proposing changes to increase locationally targeted activities, the Commission encouraged the IOUs to "think creatively" about additional changes that could be made to enhance or support the Commission's objectives and the 2015 portfolio.[21] The Scoping Memo provides examples of possible creative changes, including using a "locational premium" when calculating avoided costs, and/or identifying measures that may benefit from being

[21] ACR and Scoping Memo, R.13-11-005, p. 5.

evaluated using an alternative baseline.[22] SCE interpreted these as examples and not an exclusive list of what could be proposed. SCE looked into what changes could be made specifically to claimable savings policies to support SCE's J-S region activities for 2015 because claimable energy savings truly drive program activity.

The Scoping Memo recognizes the need for programmatic changes starting in 2015 due to the SONGS outage.[23] In addition to amplifying existing programs in the J-S region, expanding early retirement measures could help mitigate these capacity concerns. As such, SCE proposes exploring changes in policies and practices *limited to the J-S region* that would support additional early retirement program activity, helping accelerate adoption of incremental EE and leading to immediate demand reductions in this region.

SCE's assessment of the J-S region indicates that commercial lighting and HVAC are the largest loads for this circuit (commercial buildings constitute 62% of peak load, of which roughly 70% comes from lighting and HVAC). However, fewer than 10% of commercial customers in the region participated in SCE's EE program during the 2010-2012 cycle. Given the grid load associated with these buildings and end-uses, in addition to amplifying existing SCE activities, an expansion of measure offerings can help engage much needed customers. Early retirement offerings with higher incentives tied to higher claimable savings can generate this additional customer uptake cost-effectively.

SCE would like to pursue adding more deemed early retirement measures including HVAC (e.g., central plant and incremental unitary equipment) and lighting (including controls) in the J-S region beginning in 2015. SCE would also like to explore ways to increase the amount of custom early retirement activity in this target area.

---

[22] *Id*., p. 4-5.
[23] Scoping Memo, p. 4.

As discussed in Sections 1-4 below, SCE recommends the Commission make the following changes limited to the J-S region to support additional deemed and custom early retirement measures:

- Develop clear, written guidelines that provide a method for assessing information in order to determine claims based on the "preponderance of evidence" standard so that custom projects that help with load reduction are not unduly prevented;
- Publically post and "freeze" approved ISP studies impacting J-S region at the beginning of each program year;
- Provide a mechanism for the IOUs to propose measure specific RULs that could be used in place of the default Database for EE Resources (DEER) assumption; and
- Remove the 20-year measure life cap (or increase it to 30 years) and allow the IOUs to provide evidence of longer lives for applicable deemed and custom measures.

Finally, SCE does not recommend changing avoided cost calculations as a way to incorporate locational value in EE (and demand side management (DSM)) program design. Introducing locational adders has the potential to interfere with SCE's efforts to utilize DSM optimally in meeting local area capacity and other needs. SCE notes that with minor exceptions, the locational price differences visible in locational wholesale market prices are small, and similarly, the differences in the cost of local resource adequacy resources SCE procures across its service area do not in general justify locational prices. Measuring, analyzing, and adopting locational premiums for DSM will needlessly incur great time, expense, complexity, and controversy, as well as possibly leading to an avoided cost regime that will be opaque to market actors and stakeholders.

Location can have value for longer-term planning where need is associated with CAISO-defined local capacity areas. Selection of EE and other DSM resources participating in SCE's Local Capacity Requirements solicitation will be based on the value that such resources provide

in comparison with other eligible resources.[24] In addition, there continues to be value in applying tests of cost effectiveness, as these tests allow the value of DSM to be assessed from a variety of perspectives. In the case of locationally targeted EE programs, it is preferable that SCE be able to review cost-effectiveness then make decisions on which programs to pursue while also demonstrating that the mix and cost of programs is optimal in light of all available resource options.

1. Clarify the Commission's Approach to Preponderance of Evidence

In order to justify a project-by-project claim that a device/technology was retired early due to IOU influence, the IOUs must provide evidence to Commission Staff. Pursuant to D.12-05-015, Commission Staff then use a "preponderance of evidence" standard to make a determination on whether or not an early retirement baseline can be used to calculate savings.[25] D.12-05-015 recognized there may be different ways to implement this "preponderance of the evidence" demonstration and directed Commission Staff to provide additional clarification.[26] As such, the IOUs and Commission Staff have been involved in a collaborative effort, begun in 2013, to clarify these directives with a written document.[27] This effort has been promising, but thus far remains unfinished. The present lack of clear guidelines presents a significant barrier to effective and efficient implementation of early retirement projects. SCE recommends the following actions to complete this effort and ensure that all early retirement savings be captured in a timely and cost-effective manner:

---

24 For more information on the Local Capacity Requirements solicitation, see D.13-02-015, Decision Authorizing Long-Term Procurement for Local Capacity Requirements.

25 D.12-05-015, pp. 346-347; Note that D.12-05-015 implies that either baseline should be considered equally, and that early retirement should not be held to a higher standard.

26 *Id.*

27 In July 2013, the IOUs and Commission Staff formed a working group to provide custom project guidance on project basis (RET, ROB, etc.), EUL/RUL definitions, and preponderance of evidence. A final guidance document is expected in April, 2014.

SCE requests the Commission reiterate its recognition of the outstanding need for clear written guidelines providing a methodology for assessing the available evidence, in order to determine whether the "preponderance of the evidence" burden has been met. SCE also requests the Commission require that these guidelines clearly delineate what constitutes a "preponderance of the evidence,"—a showing that something is "more likely to be true than not true."[28] In other words, establishing by a likelihood of greater than 50% that the device or technology was or was not retired early. These guidelines should also specify what evidence may support a finding in favor or against early retirement. Finally, SCE requests these guidelines provide a methodology for assessing evidence, or lack thereof, in favor of early retirement and a methodology for balancing this against evidence, or lack thereof, in favor of "not early retirement."[29]

To the extent the guidelines specify that certain types of evidence or documentation are seen as required (or even just generally expected) in order meet the burden of proof, SCE requests the following clarifications concerning such documentation requirements:

- Required project documentation should be readily available;
- The guidelines should contain explicit documentation requirements that are readily actionable by IOUs, customers, and/or project developers;
- The level of required documentation should be consistent with the project impact; and
- The clarifying document should consider all forms of IOU influence, *including technical support provided by engineers and technical experts.*

---

28 *See* Judicial Council of California. *Judicial Council of California Civil Jury Instructions ("CACI"), December 13, 2013,* p. 3; *available at* http://www.courts.ca.gov/partners/documents/caci_2014_edition.pdf. Accessed 03/25/2104.

29 That is, the measure was replaced on burnout or normal replacement.

SCE requests the Commission direct IOUs to continue working with Commission Staff to further develop guidelines that include the above elements by December 1, 2014, with the goal of making it easier and less costly to capture these savings.

2. Publically Post and "Freeze" Industry Standard Practice (ISP) Studies in the Beginning of Each Year

SCE would like to explore the role of ISP studies and how, if appropriate, exemptions could be made to support acceleration of measure adoption. ISP studies are often used as baseline proxies for projects where code does not apply. Unlike code, the determination of ISP is not set by a clear, publically available document that project developers could work from prior to project development. Additionally, ISP determinations often take place during the implementation period, which creates uncertainty in the marketplace about what types of measures could be implemented. SCE proposes that studies impacting J-S region be publically posted and "frozen" at the beginning of each program year and not changed until the following year.

3. Provide a Mechanism by Which IOUs Can Propose Measure Specific Remaining Useful Life Values

Revisiting policies related to measure life and truly valuing measures with longer lives and deeper savings could greatly support incremental EE activities in the J-S region. SCE recommends the Commission provide a clear channel (per discussion in D. 12-05-015)[30] for SCE to submit available industry data or approaches that can be used for

[30] D.12-05-015, p. 348; The use of a DEER remaining useful life starting point for the acceleration period may be replaced. However, this should be allowed only if credible evidence is available to support an alternative value and that evidence leads Commission Staff to deem it more credible than of the adopted DEER values. Commission Staff should develop guidelines for the evaluation of remaining useful life evidence for the replacement of the DEER default values for specific projects and technologies.

determining specific remaining useful life (RUL) values rather than relying on a default fixed DEER assumption.

The Commission's policy through DEER of fixing RUL values at a default value of 1/3 of the EUL for all measures inhibits SCE's ability to shape program design and activity (in both the deemed and custom portfolios) and target high potential, long life, early replacement offers. For instance, measures such as chillers, which are critical to the J-S region, have a 6.7 year RUL cap, thereby severely limiting the number of chillers that can undergo early retirement. In addition, EUL is a median estimate—that is, an estimate indicating that at that age, 50% of the existing equipment would have died and 50% would still remain in operation. A default RUL value of 1/3 therefore not only conflicts with certain available industry data, it is also counter-intuitive to the definition of EUL. The IOUs and Commission should leverage available data so that EE programs can capture the energy savings they already know are available.

To better estimate RULs, the condition of the equipment being replaced needs to be considered, as well as the equipment's age. There have been numerous studies on the analysis of RUL predictions that depict RUL as a function of the existing equipment's life, typically identified as either reliability based analysis, stressor based analysis, or degradation based analysis.[31] SCE requests it be allowed to use these analyses – or similar approaches that factor maintenance into the service life – to determine RUL values in the J-S region where the default DEER value is not appropriate. Increased RUL values will effectively increase the number of projects that would be eligible for early retirement.

---

[31] Coble, Jamie Baalis, "Merging Data Sources to Predict Remaining Useful Life – An Automated Method to Identify Prognostic Parameters." PhD diss., University of Tennessee, 2010.

4. Remove or Increase the 20-Year Life Cap for Measures

Removing the 20-year cap on EULs, or increasing the cap to 30 years, will allow more impactful, longer-lived measures to be captured in the J-S region. Relevant measures that have EULs greater than 20 years include residential insulation (25 years)[32] and chillers (23 years).[33] Additionally, preventative and/or predictive maintenance practices have a significant impact on effective life.[34] Where available data exists, custom measure life consideration should be made for existing maintenance practices (as has been discussed as part of the custom Ex Ante Review process) and/or enhanced maintenance practices that could ultimately lead to longer lived measures and thus increased reliability in these areas. The Commission has retained the 20-year EUL cap despite it not always reflecting real-world conditions. Increases in EUL based on available data would also have a direct, significant impact on increasing RULs, thus accommodating more early retirement projects. Finally, this change would tend to support more comprehensive EE measures and related maintenance practices that would help sustain long term peak load reductions and reliability, consistent with Commission policy.

V.

SUPPORTING AND LEVERAGING PROPOSITION 39 ACTIVITIES

In 2012, California voters approved Prop 39, the California Clean Energy Jobs Act, which allocates approximately $550 million annually for eligible EE and clean energy projects, and related support activities, for K-12 public schools and California Community Colleges (CCC). The Prop 39 Program is administered by the California Energy Commission (CEC) and is planned for five years beginning fiscal year 2013-2014. Prop 39 represents a unique

---

32 *Available at* http://www.ma-eeac.org/Docs/8.3_TRMs/1MATRM_2013-15%20PLAN_FINAL.pdf
33 *Available at* http://www.ma-eeac.org/Docs/8.3_TRMs/1MATRM_2013-15%20PLAN_FINAL.pdf
34 *Available at* http://www1.eere.energy.gov/femp/pdfs/om_5.pdf

opportunity for the State to support schools in implementing comprehensive EE projects, particularly when coupled with the rebates, incentives, partnerships, and support services offered by the IOUs. SCE supports this important initiative and is committed to continuing the coordination that began in 2013 through regular meetings and information sharing with the CEC, CPUC, CCC Chancellor's Office, other utilities, and our school and community college customers to create a seamless and effective process for implementing comprehensive projects. As described below, SCE will support both K-12 schools and CCCS in 2015.

A. SCE Proposes to Continue and Expand Prop 39 Support for K-12 Schools

Since 2013, SCE has been engaged in Prop 39 support activities including outreach to all eligible K-12 school districts to discuss potential projects and strategies to couple Prop 39 funds with IOU services and incentives. SCE also began collaboration with the School Energy Coalition (SEC),[35] an organization designed to partner with schools to find funds and provide support for EE projects and plans to join in two upcoming SEC-hosted conferences.

In the fall of 2013, SCE jointly sponsored an annual schools symposium with the Los Angeles Department of Water and Power (LADWP) and Southern California Gas Company (SoCalGas) focusing on Prop 39 and coordination with IOU offerings. Based on feedback from schools, SCE also developed and launched an ongoing series of webinars in early 2014, designed to help schools comply with Prop 39 benchmarking requirements and promote other IOU services and rebates to be used in conjunction with Prop 39 grants.

In 2015, SCE will continue to coordinate with Prop 39 stakeholders. In addition, SCE identified key services and offerings to assist K-12 customers, comprised of both existing offerings and enhanced offerings, and more specifically targeting K-12 schools. SCE will

---

[35] School Energy Coalition consists of school districts (large and small), community colleges and businesses that specialize in energy efficiency and advocacy. Membership provides the access to legislative information and networking with other schools and advocates seeking to learn more about the "green" arena.

provide: (1) K-12 support in navigating Prop 39 and IOU programs, (2) Prop 39 support services, and (3) rebates and incentives.

1. Provide K-12 Support in Navigating Prop 39 and IOU Programs

K-12 schools have identified a need for assistance navigating Prop 39 and IOU programs to understand program requirements and develop and submit projects. SCE proposes to provide comprehensive guidance and support through enhancements to the Cool Schools program and SCE's account representatives. The 2013-2014 Cool Schools program offers incentives and support services to promote IDSM projects, with an emphasis on deep retrofit projects. In 2015, SCE proposes to modify the Cool Schools program to target Prop 39 customers. The program will primarily focus on non-resource program elements and will also connect K-12 customers with appropriate rebate programs. The program will help K-12 customers:

- Benchmark their facility;
- Develop an energy action plan;
- Select and complete the most appropriate audit for their projects;
- Identify and prioritize measures and projects according to Prop 39 requirements;
- Leverage IOU offerings to complement Prop 39 funding; and
- Complete and submit Prop 39 applications.

Since Prop 39 funds will be awarded beginning in 2014, SCE plans to begin modifying Cool Schools in 2014, and fully transition it by the beginning of 2015.

In addition, SCE assigns all public K-12 school districts dedicated SCE account representatives that are familiar with their individual K-12 facilities and needs, and are trained in DSM programs and Prop 39 requirements. Account representatives will continue to serve as a key resource for schools to assist them in walking through the Prop 39 process, and developing and completing projects.

2. Provide K-12 Prop 39 Support Services Include Benchmarking, Audits and Data Management

SCE will offer support services that account representatives and/or the Cool Schools program can help customers bundle, or alternately, interested schools can select to participate in independently. These include:

- Benchmarking: SCE offers free benchmarking, a Prop 39 requirement, through the statewide Commercial EE Program (Energy Advisor sub-program), which provides customers with a numerical "score" based on their energy usage as compared to other similar buildings. As noted above, SCE also launched a series of benchmarking webinars in early 2014 for K-12 schools, and will continue to offer additional webinars based on school customer demand in 2015.
- Audits: Prop 39 requires schools identify eligible energy measures through an energy survey, American Society of Heating, Refrigerating and Air-Condition Engineers (ASHRAE) Level 2 audit, or data analytics (low touch/no touch audits). SCE will offer the following programs in 2015 to support this.
- Commercial EE Program (Energy Advisor Program): This program offers a variety of nonresidential audits, including online and onsite audits. New 2015 offerings include expansion of the program to include deeper, more comprehensive audit services specifically for schools, which would be offered in coordination with SoCalGas. SCE also proposes to launch a campaign in 2015 for the online Business Energy Advisor tool to encourage schools to self-audit.
- Low Touch/No Touch Audits: In 2014, SCE expects to complete "low touch" audits through the FirstFuel Analytics-Enabled Efficiency Program, an IDEEA 365 program which provides remote audits using historical

consumption data and building information to identify high potential leads for EE measures. If this effort is successful in 2014, SCE proposes to pursue additional low touch audits in 2015, which will include K-12 schools and CCCs in SCE's territory. The results of these audits will be used to "screen" school customer facilities, and target those with substantial energy savings potential for more comprehensive audits. This approach is a cost-effective tool that can be used to focus more comprehensive audits, which are typically time and resource-intensive.

- Cool Schools: Qualified customers participating in the Cool Schools program are eligible for various audits, including onsite and/or low touch/no touch audits, depending on their level of participation and their specific projects.

Lastly, Prop 39 requires customers to release historical and prospective utility billing data to the CEC. The IOUs and the CEC have jointly developed a data release form for this purpose and are developing a data transfer protocol. While the specifics of this process will determine final costs, at this time SCE estimates a cost of approximately $20,000-$50,000 to support this effort in 2015, which includes report development, data transfer protocol development, and data transfer. SCE has included this preliminary cost in the 2015 Cool Schools program budget and will reassess the cost as final data transfer requirements are developed with the CEC.

3. Offer K-12 Rebates and Incentives Complimentary to Prop 39

EE school measures typically include lighting, controls and sensors, energy management systems, and HVAC measures, and in some cases may include measures such as chillers and pool pumps. In addition to reducing total customer costs, IOU rebates improve the cost effectiveness calculations for Prop 39 projects, as the CEC's guidelines allow schools to reduce the total project cost calculation by the amount of IOU

rebates or other sources of funds that do not require repayment. SCE will continue to offer rebates on typical school measures in 2015 through the:

- Commercial EE Program: Schools are eligible for customized and deemed rebates for measures such as lighting, controls, energy management systems, and chillers.
- Schools EE Program (SEEP): The 2013-2014 SEEP provides EE and DR audits and direct installation of no cost and low cost measures to K-12 schools. While impending Title 24 code changes effective July 2014 significantly affect the cost-effectiveness of this program, SCE will continue to offer the program on a limited basis to interested schools in 2015, and will offer direct installation of measures, such as linear fluorescent lighting, LEDs, and occupancy sensors. A minimal co-pay (up to 10% of cost) will be included in the program in 2015 to allow measures to be included in Prop 39 projects.
- Nonresidential HVAC Program: K-12 schools have shown strong interest in packaged HVAC retrofits, which are typically more expensive measures with longer payback periods. In February 2014, the Commission authorized[36] expansion of the Nonresidential HVAC Program to include an incentive for early retirement of HVAC units. This offering provides an incentive to HVAC contractors to install more efficient units; these cost savings are then passed on to the customer. SCE proposes to continue this offering in 2015, and increasingly target schools, which will encourage Prop 39 HVAC projects by reducing the overall cost and by positively impacting Prop 39 cost-effectiveness calculations.

---

[36] Advice Letter 2973-E was approved by the Commission's Energy Division, effective December 26, 2013.

- Work with K-12 Schools in the J-S Region:[37] In 2015, SCE proposes to target one to three school districts in the J-S region, and to work closely with them to deliver additional technical assistance and incentives to promote deeper energy savings in the region.

B. SCE Proposes to Continue and Expand Prop 39 Support for CCCs

In 2013, SCE began supporting the CCC Prop 39 program through the CCC/IOU Partnership, a successful statewide partnership between the four IOUs and the CCC system that has operated since 2006. Given the existing infrastructure and proven track record of this partnership, the CCC Chancellor's Office was authorized to develop the statewide Prop 39 CCC Program, which operates under separate Prop 39 guidelines than K-12 schools, and allowed for expedited Prop 39 funding for CCCs in 2013.

The CCC Partnership provided extensive outreach and technical support services to CCC districts to identify, develop, verify, and implement projects. SCE support included enhanced outreach funding, project development, and technical support for 21 districts, representing 43 campuses. Examples of support include:

- Education about the CCC/IOU Partnership and Prop 39 Program opportunities. Outreach activities will continue to include campus forums, workshops, and conference participation;
- Identification of projects and development of a "Call for Projects Lists" for submission to the Chancellor's Office;
- Creation of energy savings calculations and incentive applications that work for both SCE incentive programs and Prop 39 applications;

---

[37] This region was identified based on numerous factors related to the loss of SONGS and the anticipated retirement of existing once-through cooling generators. See Section IV for more information.

- Technical verification of energy savings calculations and project eligibility through the SCE incentive applications process;
- Detailed development of Prop 39 applications and supporting calculations;
- Coordination between CCC/IOU Partnership and the Prop 39 Program;
- Support for project status tracking and reporting; and
- Verifying completion of projects and project closeout.

By February 2014, SCE had engaged all districts in its territory, and helped CCCs identify 60 Prop 39 projects, representing projected energy savings of more than 10 million kWh for the first year of the program. In 2015, SCE plans to continue the successful work of the CCC Partnership and actively support ongoing Prop 39 project development.

C. SCE Proposes to Pursue Promising Emerging Technologies Applicable to Schools and CCCs

In light of Prop 39, the Emerging Technology program is currently analyzing technologies for modular units in K-12 schools and CCCs, such as classroom air conditioning replacements and classroom controls options, daylight with controls, direct-current powered low voltage overhead lighting, and HVAC systems powered by roof-mounted photovoltaic solar installations with battery backup. In addition, SCE will investigate powering computers, tablets, projectors and other plug loads in the classroom directly from the PV/battery system. The evaluation of these technologies is expected to start in 2014. If these technologies are successful, SCE proposes to implement them in schools during 2015 to promote comprehensive and whole building solutions.

D. SCE Recommends Expediting the Custom Project Review for Prop 39 Projects

Schools are often required to implement significant EE retrofits in short time periods, for example during summer, spring, or winter school breaks to avoid school interruption. As such, an expedited Ex Ante Review process will support schools that choose to participate in Prop 39

and utility programs. SCE proposes an expedited custom project review process for K-12 schools and CCCs customized retrofit incentive applications that are being funded by Prop 39. Specifically, SCE requests:

- A shortened review period for initial custom project selection. In the current process, Commission Staff has 10 days from the date the IOUs provide a list of current projects to determine which custom projects are selected for further review. SCE proposes to flag any Prop 39 projects for Staff on the custom measure and project archive (CMPA) list, and requests Staff notify the IOU within five days of receipt if a Prop 39 project is selected for review.
- A shortened review period for selected projects. If a flagged Prop 39 project is selected for further review, SCE proposes Commission Staff review the project within 10 business days from the time at which SCE supplies supporting project documentation.

E. SCE Recommends the Commission Explicitly Confirm IOU Attribution of Energy Savings for Prop 39 Projects

Prop 39 represents a new source of funding that schools can access to complete EE projects, in addition to the rebates and services the IOUs offer for many of the same measures. While the Scoping Memo signals the Commission's support for Prop 39, and directs the IOUs to target Prop 39 customers, SCE seeks explicit confirmation that the IOUs can claim energy savings from projects participating in both Prop 39 and IOU incentive programs, and will not be subject to reductions in energy savings due to perceived free ridership.

If a customer chooses to participate in both Prop 39 and an existing SCE incentive program, SCE proposes to claim energy savings for all eligible measures that receive SCE incentives or rebates, using the same methodology applied to any other customer. That is, Prop 39 customers:

- Participate in an existing SCE incentive program;

- Install a measure eligible under the selected SCE incentive program; and
- Receive an incentive based on standard, above code energy savings.

SCE would claim standard, above code energy savings for the incented measures (only) through the participating program, and would use the standard net-to-gross ratio and all other parameters applicable to the respective IOU program.

SCE notes there is precedence for allowing energy savings claims when other sources of funding outside of the ratepayer funds are available. Prop 39 parallels the 2009 American Recovery and Reinvestment Act (ARRA) funding, which provided federal stimulus funds to local governments and others for EE, and was used in coordination with IOU program rebates and other offerings to complete EE projects. The Commission previously commented[38] on the use of ARRA funds in conjunction with IOU funds, noting that existing Commission rules encourage coordination and leveraging of ratepayer and ARRA funds, and allowing the IOUs to claim energy savings for IOU projects funded in part with ARRA funds, while cautioning that IOU savings claims should be limited to only those measures receiving ratepayer-funded incentive dollars. SCE believes this approach is also applicable to Prop 39.

Moreover, the CEC's K-12 and CCC Prop 39 guidelines[39] both encourage participation in IOU rebate programs and support services, and allow schools and CCCs to subtract IOU rebates and incentives from their cost calculations when determining project cost-effectiveness.

SCE requests the Commission explicitly confirm that energy savings for projects receiving both Prop 39 funding and IOU incentives will be eligible for standard energy savings credit, to ensure the IOUs can fully support and enhance schools' Prop-39 related EE initiatives in 2015 and beyond.

---

38 D.09-09-047, pp. 103-104.

39 Proposition 39: Clean Energy Jobs Act of 2012 California Community Colleges Energy Project Guidance, dated May 29, 2013, pp. 1, 5, 12, 18, 19, 20, and Proposition 39: Clean Energy Jobs Act- 2013 Program Implementation Guidelines, dated December 2013, pp. 20-21.

* * *

SCE looks forward to working with the CEC, CPUC, other utilities, K-12 schools, and CCCs in 2015 to develop robust and comprehensive projects leveraging both Prop 39 and IOU program funds and services, and urges the Commission to approve the proposals discussed herein in support of this effort.

VI.

SCE PROPOSES ENHANCEMENTS TO REFINE AND IMPROVE THE ENERGY UPGRADE CALIFORNIA HOME UPGRADE PROGRAM

The Scoping Memo urges the IOUs to consider enhancements to the EUC HUP specifying five areas that should be addressed.[40] Since EUC's inception in 2009, the IOUs have encountered significant challenges, resulting in low program uptake and program cost effectiveness. Over the years, SCE has worked with SoCalGas and other stakeholders to make significant programmatic changes that respond to feedback from customers and various stakeholders. Existing program activity demonstrates that positive results are being achieved from these initiatives, albeit not at the desired rate. Throughout SCE's administration of the EUC program, SCE has continually worked to find solutions to improve program uptake and contractor adoption, while working toward improving the program's cost effectiveness. In developing the 2015 plans, the statewide IOU team has identified a number of improvements that can be made to the HUP, which are currently in progress and will continue in 2015. The IOUs have also engaged a market transformation consultant, in coordination with the RENs, to refine and improve the program. SCE is addressing the items in the Scoping Memo as follows:

---

[40] Scoping Memo, pp. 6-7.

A. SCE Proposes to Developed New Strategies for Plug Load Appliances and Lighting

The Scoping Memo directs the IOUs to develop new strategies for HUP to address plug load appliances and lighting. As discussed below, SCE has begun addressing these issues and proposes to continue this effort in 2015. Specifically, SCE will integrate appliance and lighting measures from other residential EE programs, such as:

- Lighting: SCE is combining the efforts of the HUP and Lighting Innovation programs to obtain increased volume of HUP projects. SCE has designed HUP packages that include the most commonly used measures that meet the 10% savings threshold. An additional incentive of lighting vouchers will be given to those customers taking advantage of the pre-selected packages achieving a higher level of savings. Contractors can redeem these vouchers for discounted price products with participating midstream lighting distributors. This effort is intended to make the program more attractive and also encourage customers to use more energy-efficient lighting products in their homes. It is also an opportunity to test program integration and collect customer feedback. Additionally, the results of a poll of SCE's high performing contractors show that they are supportive of this proposal and have expressed confidence that this plan will increase the number of projects.
- Home Energy Management: SCE's integration of comprehensive plug load appliances, lighting, and variable pool pump measures into the EUC program will be interconnected to a home energy management system with in-home display for feedback and end-use energy usage disaggregation.
- Home Energy Advisor: Beginning April 2014, SCE will launch and evaluate a targeted media campaign pilot to cost effectively increase participation in the Home Energy Advisor (HEA) program. The campaign will include tactics to build on HEA participation and move customers into participating in SCE's EUC program. The purpose of the campaign will be to: (1) help HEA achieve its program participation

metric of .01 percent attribution to HUP; (2) Provide exposure for participating contractors with the goal of driving qualified leads directly to them; (3) educate SCE customers on the benefits of the HEA survey and the whole-house approach to EE; and (4) facilitate customer engagement and behavior change. Results of the campaign will be used to inform 2015 efforts in this area.

- HVAC Quality Installation: In May 2014, SCE will integrate HVAC Quality Installation (QI) and Advanced Home Upgrade. SCE is working on the logistics of database integration and expects to recruit existing HVAC contractors. This work will be continued into 2015 as appropriate.

B. SCE Proposes to Use and Distribute Additional HUP Modeling Tools to Contractors

The IOUs are currently working on a project to broaden allowable software for the HUP program. This project includes development of a software screening test and an empirical calibration approach to: 1) ensure that new software allowed into the program can accurately predict energy savings within a reasonable range, and 2) improve the ability of new software to accurately predict savings over time.

These approaches are being developed based on input from a wide range of stakeholders including contractors, raters, software vendors, financing firms, program managers, utilities, technical experts, the CEC, and CPUC. These stakeholder groups recognize the need to diversify allowable software for the HUP program while improving predictive accuracy and lowering transaction costs for participants.

C. SCE Proposes to Further Streamline HUP Reporting Requirements

SCE agrees there is a need to streamline reporting and processing, and has already undertaken various efforts to reduce the administrative burden on customers and contractors and further streamline the HUP Program. For example, SCE has implemented an automated process for service account verification using a customer's service account number. In addition, SCE is

currently working to add service account address lookup functionality. This service allows for immediate notification of account eligibility eliminating the 24 hours required for the prior manual process.

In March 2014, SCE and SoCalGas launched a simplified process to streamline contractor requirements at the initial stage of a retrofit so that contractors can begin work within one day of meeting with customers, in contrast to the original process, which could take up to five days. The revised process includes removal of forms, reduction in the number of documents that need to be uploaded to database, decreased cycle time for confirmation of incentive reservations, and other efficient changes. The changes SCE continues to implement in the EUC program will further reduce the administrative burden for customers and contractors and increase the uptake of EUC projects.

D. SCE Proposes to Target and Reach Out to Specialty Contractors

As a contractor-driven program, EUC relies on contractor's reaching out to customers and promoting participation. To support this effort, SCE has altered its contractor recruiting process to include a dedicated account manager for contractors who have expressed interest in participating in the program. The account manager is assigned based on the contractor's location and will guide them through the end-to-end enrollment process.

Additionally, project coordinators are contacting specialty contractors to engage and educate them about the EUC program, and the program is meeting with trade organization leaders and members from the various trade organizations including HVAC, Insulation, Home Performance, and Home Raters to expand the program's reach. SCE's coordinators will join these organizations as partners, attend events, and encourage contractors to enroll in the program.

Lastly, SCE and SoCalGas are jointly developing an enhanced training module for contractors to provide them the necessary skills to educate customers about EE and enable them to effectively market the program. These collective efforts will be continued, assessed, and expanded or modified as appropriate in 2015.

E. SCE Proposes to Reconfigure the HUP Point/Rebate Structure

SCE, along with the other IOUs, continue to analyze and discuss the ideal point/rebate structure for HUP. Further discussion, research and analysis are needed on the purpose and use of financial incentives to achieve clearly defined program objectives (e.g., comprehensiveness, uptake, cost effectiveness). SCE will continue to work with Commission Staff, IOUs, and RENs, to develop a road map to guide program development, and will prioritize reconfiguring the HUP point/rebate structure.

VII.

OTHER SCOPING MEMO ISSUES

A. SCE Includes its Technical Savings Assumptions as Attachments

1. Energy Savings Calculators ("E3" Calculators)

As directed in the Scoping Memo, SCE provides an E3 calculator for each program and a full portfolio "rolled up" E3 calculator (made up of five calculators due to the line limitation in the current E3 calculator) in Appendix D. The Scoping Memo requested the E3 calculators contain "only major contributing measures/offerings/ estimated activity"[41] due to the significant time required to prepare E3 calculators on a measure level. However, it is not possible for SCE to base program plans from major contributing factors alone because "bottoms up" forecasting is required to develop the most accurate forecasts. Therefore, SCE's E3 calculators provide measure-level information.

---

[41] Scoping Memo, p. 10.

2. Database for Energy Efficiency Resources (DEER) Values and Adjustment Factors

The Scoping Memo limits 2015 portfolio *ex ante* updates to DEER 2014 and *ex ante* values on the Efficiency Savings and Performance Incentive (ESPI) mechanism uncertain measures list for which the update will create enough certainty to remove the measure from the list.[42] Additionally, the IOUs may use current non-DEER workpaper values adjusted to approximate DEER 2014 values.[43] As such, the forecasted savings calculations provided herein are based on DEER 2011 and 2013-2014 workpaper values adjusted to approximate DEER 2014 and to reflect other likely changes not captured by DEER, including other code impacts and updates to other non-DEER workpaper measures with new study data. SCE provides its workpaper adjustment values and related supporting documentation in Appendix E.

SCE may modify values on the ESPI uncertain measure list, but it is unclear if the updates will provide sufficient information to remove the measures from the list. See Appendix E for SCE's proposed 2015 work paper that was used for portfolio forecasts, a copy of the same work paper will also be uploaded to the work paper project archive. SCE may also submit several new workpapers for Commission Staff review prior to 2015.

B. SCE Supports a Recalibration of the Efficiency Savings and Performance Incentive Mechanism

SCE supports a recalibration (and subsequent recalculation) of the ESPI mechanism to account for new goals and budgets for 2015 based on the measure assumptions presented in SCE's E3 calculators as part of its 2015 EE plans. SCE recommends the Commission adopt

---

42 Scoping Memo, p. 14.
43 Scoping Memo, p. 15.

these measure assumptions presented in SCE's 2015 EE plans and direct the IOUs to recalculate the ESPI earnings coefficients using these CPUC-adopted measure assumptions. This will allow for consistency among the 2015 EE program forecasts and the ESPI coefficient calculations.

VIII.

SCE REQUESTS CONTINUED DR IDSM FUNDING

The Decision Adopting Demand Response Activities and Budgets for 2012 through 2014, (D.12-04-045), issued April 30, 2012, approved SCE's 2012-2014 DR program application, which included DR IDSM program and pilots for 2012. D.12-04-045 also directed the IOUs to file future requests for the DR portion of their IDSM budgets in the 2013-2014 EE program application. In D.12-11-015,[44] the Commission adopted SCE's 2013-2014 EE and DR IDSM programs and budgets that included the DR IDSM activities. Specifically, D.12-11-015 authorized $23.5 million for DR funding in SCE's 2013-2014 DR IDSM programs. Additionally, SCE's EE and DR IDSM compliance filing[45] identified the DR ratemaking and cost recovery mechanisms for the DR IDSM funds. For the DR IDSM programs and pilots for 2015, SCE intends to continue the efforts to integrate both the EE and DR program portfolios and pilots, and maintain continuity for customers for its DR IDSM-related activities with no increase to annual funding ($11.7 million). This will allow SCE to continue to pursue the integration of its EE, DR, DG, and energy storage activities, pilots and programs in response to the California Long Term EE Strategic Plan, and the DSM Coordination and Integration policy objectives, as well as in compliance with the specific guidance from previous EE and DR proceedings.

---

[44] D.12-11-015, pp. 88-89, Table 12 and Ordering Paragraph No. 1.
[45] Advice Letter 2836-E submitted on January 14, 2013.

IX.

REVENUE REQUIREMENT AND COST RECOVERY OF SCE'S 2015 BUDGET

A. Total Revenue Requirement

As described in SCE's Proposal and supporting Appendices and detailed in Table IX-1, below, SCE is requesting $360.5 million dollars, $348.8 million[46] in funding for proposed 2015 EE activities and $11.7 million for proposed 2015 IDSM DR activities.

Table IX-1
SCE's 2015 Funding Request for EE and DR IDSM Programs
($000)

		Authorized 2014	Proposed 2015	Change
1.	EE Funding Program Budget	352,658	348,798	(3,860)
2.	Less Unspent/Uncommitted EM&V Carryover Funds	-	(21,300)	(21,300)
3.	Less Unspent/Uncommitted Program Carryover Funds [1]	(127,309)	(45,858)	81,451
4.	Total EE Funding	225,349	281,640	56,291
5.	IDSM Funding	11,746	11,746	-
6.	Total EE and IDSM Funding	237,095	293,386	56,291
7.	FF&U	2,664	3,297	633
8.	Total Authorized Revenue Requirement	239,759	296,682	56,923

[1] Total EE Funding in 2014 also included 2010-2012 OBF loan budget carryover of $11.4 M unspent/uncommitted funds, as shown on Line 3.

This total budget request represents an overall decrease from SCE's 2014 authorized budgets for EE and DR IDSM. However, as shown in Line No. 3 of Table IX-1 above, the 2014 authorized revenue requirement was decreased by the carryover of unspent/uncommitted amount of approximately $127.3 million. As a result, the impact of the funding request in 2015 is a net increase of $56.9 million in SCE's overall revenue requirement included in customers' Public

[46] After adjusting for the EE finance pilots (which were previously authorized through 2015, and thus not included, this request represents a slight increase over SCE's 2014 authorized EE budget. This increase is due to an increase in the REN proposal for 2015 which constitutes $25.5 million dollars.

Purpose Programs Charge (PPPC) rate levels in 2015 compared to the current rates as authorized.

As in the past, SCE is requesting to use funding that has been already collected from customers that has not been spent, or is not committed to be spent on EE programs, as another source of funding the 2015 EE programs. As shown on Line Nos. 2 and 3 in Table IX-1 above, SCE currently estimates these unencumbered funds to be approximately $67.158 million in 2015.[47] These funds represent pre-2013 customer commitments and EM&V study commitments that are expected to expire or drop, and are in addition to the $127.3 million identified for return in 2014. Additionally, SCE proposes to treat 2015 as the third year in the 2013-2015 cycle. As such, unspent, uncommitted funds, (if any) from 2013-2014 would be used to fund 2015 activities.

B. EE and DR IDSM Ratemaking

SCE proposes to continue to use its existing Public Purpose Programs Adjustment Mechanism (PPPAM) to recover its authorized EE funding amounts. SCE's authorized EE funding includes two funding categories: (1) Procurement EE, which includes all EE programs except the On-Bill Financing loan pool, and (2) On-Bill Financing Program (loan pool only). Table IX-2, below illustrates SCE's 2015 funding request for these two categories.

Table IX-2
EE Funding for 2015
($000)

1.	EE Funding	2014	2015	Change
2.	Procurement EE	318,971	337,698	18,727
3.	On Bill Financing *	33,687	11,100	(22,587)
4.	Total EE Funding Requirement (w/o FF&U)	352,658	348,798	(3,860)

* Includes 2015 OBF loan pool only; all other program costs are included in the Procurement EE balancing account.

[47] SCE will update these unencumbered amounts at the end of the year for 2015 once the "actual" unencumbered amount is known.

For EE costs, SCE proposes to continue to use its existing: (1) Procurement Energy Efficiency Program Balancing Account (PEEBA) for procurement EE ratemaking; (2) On-Bill Financing Balancing Account (OBFBA) for the On-Bill Financing loan funds. For DR IDSM costs, SCE proposes to continue using its current ratemaking that includes: (1) recovery of the authorized DR program annualized funding through the operation of the Base Revenue Requirement Balancing Account (BRRBA), and (2) recording the difference between the authorized DR program annualized funding with actually incurred DR program expenses in the existing Demand Response Program Balancing Account (DRPBA).[48] The DR IDSM costs will continue to be recovered from all customers through the distribution sub-account of the BRRBA.

C. Revenue Requirement and Cost Recovery for EE and DR IDSM Programs

SCE recovers its authorized EE costs through its existing non-bypassable PPPC, which applies to all SCE retail customers. SCE will increase its annual authorized EE revenue requirement on January 1, 2015 consistent with a final Commission decision on this funding request. As discussed above and shown on Line No. 4 of Table IX-1 above, assuming the Commission adopts SCE's EE funding request, including Franchise Fees and Uncollectibles (FF&U),[49] SCE will include in its Public Purpose revenue requirement and rate levels $284.8 million in 2015.[50] This represents an increase of $56.9 million from the 2014 EE funding currently in rate levels as authorized in D.12-11-015.

As shown on Line No. 5 of Table IX-1 above, assuming the Commission adopts SCE's DR IDSM funding request, including FF&U, SCE will include in its distribution revenue requirement and rate levels, $11.9 million in 2015. This represent no change in the 2014 revenue

---

[48] D.12-04-045, Ordering Paragraph No. 89, authorized DR IDSM funding to record to SCE's Demand Response Program Balancing Account.

[49] When SCE includes the funding in rate levels, the funding amount will be increased for FF&U allowances adopted in SCE's most recent General Rate Case.

[50] Subject to a year-end adjustment for any remaining unspent/uncommitted funds from prior funding cycle.

requirement of $11.9 million in DR IDSM funding currently in rate levels as authorized in D.12-11-015.

D. Rate and Bill Impact Analysis

The EE and IDSM DR funding requested in this Proposal results in a net increase in SCE's revenue requirement of $56.9 million. This results in a 0.47% increase in all SCE service customers' average rates from the rates that are in effect today.

Table IX-3
Customer Group Revenue Impact
EE& DR IDSM Request for 2015

Customer Group	Revenue Change ($000)	% Change	Present Retail Rates ¢/kWh	Proposed Retail Rates ¢/kWh
Residential	22,046	0.43%	17.46	17.53
Lighting - Small and Medium Power	20,697	0.48%	16.61	16.69
Large Power	10,531	0.55%	11.78	11.84
Agricultural and Pumping	1,688	0.45%	12.96	13.02
Street and Area Lighting	648	0.50%	17.69	17.78
Standby	1,312	0.52%	9.76	9.80
TOTAL	56,923	0.47%	15.70	15.77

On an illustrative basis, if total rates were to change as requested, an average residential electric customer would see an increase of $ 0.47 per month, from $98.34 to $98.81.

X.

CONCLUSION

SCE respectfully requests that the Commission approve its request for funding of EE and DR IDSM programs and budgets for 2015.

Respectfully submitted,

JANET S. COMBS
MONICA GHATTAS

/s/ Monica Ghattas
By: Monica Ghattas

Attorneys for
SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770
Telephone: (626) 302-3623
Facsimile: (626) 302-6693
E-mail: monica.ghattas@sce.com

March 26, 2014

Appendix A

2015 Budget Request Summary Tables

Southern California Edison - Appendix A

Table 1. Commission Adopted and Proposed Energy Savings Goals.

2013-15 Electric Goals	Program Administrator/Utility			
	2010-12 Annualized[1]	2013[2]	2014[2]	2015[3]
Annual electricity savings (GWh/yr)				
IOU program targets	1,105	660	678	692
Codes and Standards Advocacy		262	246	292
Total Annual Targets	**1,105**	**922**	**924**	**983**
Annual peak savings (MW)				
IOU program targets	242	149	144	115
Codes and Standards Advocacy		32	33	46
Total Peak Savings Targets	**242**	**181**	**177**	**160**
Annual natural gas savings with interactive effects (MMTherms/yr)				
IOU program targets				
Codes and Standards Advocacy				
Total Gas Targets				

[1] 2010-12 Annualized is the sum of the adopted CPUC goals in D. 09-09-047 for the three years divided by three including C&S.

[2] 2013 and 2014 are IOU savings targets approved in Table 5 of D. 12-11-015.

[3] 2015 is based on the Ruling in R.13-11-05 dated 3/03/2014. Included IOU owneed streel lighting savings goal

Southern California Edison - Appendix A

Table 2. Total 2015 Requested and 2010-2014 Authorized Budgets ($000).

Category (2010-14 Authorized[1] and 2015 Request)	Electric Demand Response Funds	Electric Energy Efficiency Funds	Natural Gas Public Purpose Funds	Total Energy Efficiency Funds
2010-12 Annualized Programs	$ 1,480	$ 1,178,880		$ 1,180,360
2010-12 Annualized EM&V	$ -	$ 49,120		$ 49,120
2010-2012 Annualized Total	**$ 1,480**	**$ 1,228,000**	**$ -**	**$ 1,229,480**
2013-2014 Annualized Program Funds - Utility	$ 23,492	$ 629,797		$ 653,289
2013-2014 Annualized Program Funds - REN		$ 35,748		$ 35,748
2013-2014 Annualized Program Funds - CCA				$ -
2013-2014 Annualized EM&V	$ -	$ 28,664		$ 28,664
2013-2014 Total Annualized Portfolio	**$ 23,492**	**$ 694,209**	**$ -**	**$ 717,701**
2015 Program Funds - Utility	$ 11,746	$ 309,683		$ 321,429
2015 Program Funds - REN		$ 25,466		$ 25,466
2015 Program Funds - CCA				$ -
2015 EM&V		$ 13,648		$ 13,648
2015 Total Portfolio Request	**$ 11,746**	**$ 348,798**	**$ -**	**$ 360,544**

1 Authorized budget excludes reductions from past unspent funds, carryover and and is consistent with funding approved in D. 09-09-047 and D. 12-11-015.

Southern California Edison - Appendix A

Table 3. Past and Requested Energy Efficiency Budgets

Annualized Budget by Program Area ($000)[1]	2010-2012 Authorized1 Annualized	2010-2012 Authorized Spent[1] Annualized	Carryover Spent[3] in 2010-2012 Annualized	2013-2014 Authorized[1] Annualized	2013 Authorized Spent[2] (preliminary)	Carryover Spent[3] in 2013 (preliminary)	2015 request
Statewide Resource Programs							
Residential	$ 304,003	$ 239,102	$ 6,929	$ 127,961	$ 43,555	$ 5,322	$ 90,655
Commercial	$ 305,365	$ 339,727	$ 18,647	$ 171,400	$ 91,015	$ 20,728	$ 93,357
Industrial	$ 93,355	$ 56,184	$ 2,101	$ 32,800	$ 3,952	$ 2,183	$ 8,449
Agricultural	$ 29,950	$ 19,068	$ 1,934	$ 10,460	$ 3,391	$ 2,219	$ 5,483
Codes and Standards	$ 6,767	$ 6,210	$ 279	$ 11,761	$ 3,273	$ 297	$ 5,978
Financing *	$ 21,232	$ 3,295	$ 1,744	$ 81,225	$ 3,011	$ 1,770	$ 16,295
Subtotal Statewide Resource Programs	**$ 760,673**	**$ 663,586**	**$ 31,634**	**$ 435,608**	**$ 148,197**	**$ 32,520**	**$ 220,216**
Other Resource Programs							
Third Party Programs (competitively bid)	$ 178,488	$ 101,887	$ 22,085	$ 100,396	$ 17,996	$ 7,013	$ 41,441
Local Government Partnerships	$ 87,716	$ 57,545	$ 7,941	$ 41,755	$ 8,977	$ 22,524	$ 24,577
Subtotal Other Resource Programs	**$ 266,204**	**$ 159,432**	**$ 30,026**	**$ 142,150**	**$ 26,973**	**$ 29,537**	**$ 66,018**
Statewide Non-Resource Programs							
Third Party Programs (competitively bid)	$ 18,980	$ 3,813	$ 147	$ 2,668	$ 723	$ 148	$ 1,383
Local Government Partnerships	$ 32,979	$ 17,741	$ 2,753	$ 8,485	$ 1,556	$ 2,736	$ 1,245
Emerging Technologies	$ 17,195	$ 12,219	$ 1,922	$ 21,185	$ 3,430	$ 2,228	$ 10,768
Workforce, Education, and Training	$ 41,555	$ 31,077	$ 650	$ 17,990	$ 7,754	$ 766	$ 9,165
Integrated Demand Side Management	$ 21,081	$ 14,178	$ 191	$ 1,710	$ 473	$ 36	$ 887
Other (explain each entry in text)	$ -			$ -			
Subtotal Statewide Non-Resource Programs	**$ 131,789**	**$ 79,028**	**$ 5,663**	**$ 52,039**	**$ 13,935**	**$ 5,913**	**$ 23,448**
Subtotal Utility Programs	**$ 1,158,666**	**$ 902,046**	**$ 67,323**	**$ 629,797**	**$ 189,105**	**$ 67,970**	**$ 309,683**
Non-Utility Programs							
REN'				$ 35,748	$ 158	$ -	$ 25,466
Other							
Other							
Subtotal Non-Utility Programs	**$ -**			**$ 35,748**	**$ 158**	**$ -**	**$ 25,466**
TOTAL NEW BUDGET REQUEST							
Evaluation, Measurement, and Verification	**$ 49,120**	**$ 22,595**	**$ 10,110**	**$ 28,664**	**$ 3,492**	**$ 11,699**	**$ 13,648**
TOTAL ALL PROGRAMS PLUS ME&O							
Marketing, Education, and Outreach[4]	$ 20,214	$ 5,006	$ 1,024	$ -	$ -	$ 1,166	$ -
GRAND TOTAL 2015 PORTFOLIO	**$ 1,228,000**	**$ 929,647**	**$ 78,457**	**$ 694,209**	**$ 192,755**	**$ 80,836**	**$ 348,798**

1. Authorized means the total authorized budget for the program cycle for programs irrespective of the source of funds as either from past unspent or new collections. Spent means actual funds expensed, including accruals, for activities completed during the period.

2. 2013 Spent means funds expensed for program activities occurring through 12/31/13.

3. Carryover spent means actual funds expended from funds of a previous cycle carried over as committed/obligated.

4. These budgets are as establisted in D13-04-021 and D.13-12-038 covering the 2013-2015 period; no new budget requested in this filing.

Southern California Edison - Appendix A

Table 4. Unspent Energy Efficiency Program Funding

Previous Unspent Offset to 2015 Revenue Requirements ($000). Category	Electric Former PGC Funds	Electric Procurement Funds	Natural Gas Public Purpose Funds	Total
1998-2009 EM&V Funds		$ 21,300		$ 21,300
1998-2009 Program Funds		$ 7,058		$ 7,058
2010-2012 EM&V Funds				$ -
2010-2012 Program Funds - Utility		$ 38,800		$ 38,800
2012 Program Funds - CCA				$ -
2013-2014 EM&V Funds				$ -
2013-2014 Program Funds - Utility				$ -
2013-2014 Program Funds - REN				$ -
2013-2014 Program Funds - CCA				$ -
Total	**$0**	**$ 67,158**	**$ -**	**$ 67,158**

Table 4b. Carryover Energy Efficiency Program Funding Not Yet Spent

Previous carryover funds not yet spent ($000). Category	Electric Former PGC Funds	Procurement Funds	Public Purpose Funds	Total
1998-2009 EM&V Funds		$ 1,980		$ 1,980
1998-2009 Program Funds		$ 22		$ 22
2010-2012 EM&V Funds		$ 16,415		$ 16,415
2010-2012 Program Funds - Utility		$ 44,653		$ 44,653
2012 Program Funds - CCA				$ -
2013-2014 EM&V Funds		$ 10,937		$ 10,937
2013-2014 Program Funds - Utility		$ 120,143		$ 120,143
2013-2014 Program Funds - REN		$ 17,716		$ 17,716
2013-2014 Program Funds - CCA				$ -
Total	**$0**	**$ 211,866**	**$ -**	**$ 211,866**

Southern California Edison - Appendix A

Table 5. 2013-2014 Authorized and Spent/Unspent Detail

Authorized, spent and unspent program funds (excludes EM&V) ($000) Category	Electric Procurement Funds	Natural Gas Public Purpose Funds	Total
2013-14 Annualized Authorized Program Budget	$ 694,209		$ 694,209
2013 Actual Spent[1] (Preliminary)	$ 192,755		$ 192,755
2013 Unspent			
2013 Committed and/or encumbered funds [2]	$ 125,795		$ 125,795.23
2013 Unspent - planned for use in 2014 [3]	$ 23,001		$ 23,001
2013 Unspent - estimated available for 2015 [4]	$ -		$ -

1. Actual spent means funds expensed, including accruals, for program activities occurring from 1/1/13 through 12/31/13. Included REN and EM&V and excluded Statewide Finance Program loan pool amount

2. 2013 Committed and/or encumbered funds means funds that are associated with individual customer projects and/or contained within contracts or purchase order for authorized activities after 12/31/2013~~, consistent with D. 12-11-015 page 95~~

3. 2013 Unspent - planed for use in 2014 include 2013 Statewide Finance loan pool amount, unspent/uncommitted 2013 program, EM&V and REN funds.

4. 2013 Unspent - available for 2015 are total unspent uncommitted funds and not planned for use in 2014.

Southern California Edison - Appendix A

Table 6.1 Estimated and Claimed Savings 2010-2015

	Compliance Filing Forecast [1]			Claimed		
Category	GWh	Mw	MM Therm	GWh	Mw	MM Therm
2010-12 Annualized	1,651	328		1,831	339	
2013 [2]	871	169		884	158	
2014	910	171				
2015	740	137				

1. Compliance Filing Forecast based on CPUC approved compliance filing savings estimates; may be adjusted for updated savings values. C&S savings are included as net for 2010-12 and excluded for 2013-15. Energy Savings Assistance savings are included in all years.
2. Codes & Standards savings also excluded from 2013 claimed, but includes savings from CFL Carryover

Table 6.2 CPUC Authorized Goals for 2010-2015.

	CPUC Goals[1]		
Category	GWh	Mw	MM Therm
2010-12 Annualized	1,105	242	
2013	660	149	
2014	678	144	
2015 [2]	692	115	

1 - Goals are taken from D. 09-09-047 for 2010-2012, D. 12-11-015 for 2013-2014 and Ruling in R.13-11-05 dated 3/03/2014 for 2015. 2010-12 include C&S, 2013-2015 exclude C&S and all years include ESAP.
2. 2015 Authorized goal includes street lighting

Table 6.3 Comparison of Forecast and Claimed Savings to CPUC Authorized Goals

	Compliance Filing Forecast Compared to Goals			Claimed Savings Compared to Goals		
Category	GWh % of goal	Mw % of goal	MM Therm % of goal	GWh % of goal	Mw % of goal	MM Therm % of goal
2010-12 Annualized	149%	135%		166%	140%	
2013	132%	114%		134%	106%	
2014	134%	119%				
2015	107%	119%				

Southern California Edison - Appendix A

Table 7.1 TRC Cost-Effectiveness Scenario Results.[1]

	2010-2012 Claimed	2013 Claimed	2013-2014 forecast	2015 forecast 4
Resource Portfolio (less C&S and less ME[2])		1.27	1.62	1.34
Resource and Nonresource Portfolios (less C&S and less ME)		1.08	1.45	1.11
Portfolio with C&S, ME (2013-15 only) and ESPI[3]	1.31	1.34	1.64	1.46

1. Does not include Emerging Technology, OBF revolving loan pool, credit enhancements.
2. ME is Market Effects. Only applies to 2013-2015 pursuant to D. 12-11-015 that adopted 5% spillover for resource programs.
3. Estimated or awarded Energy Savings Performance Incentive payments.
4. 2015 forecast excludes proposed bduget for 2015 Statewide ME&O and New Finance Offering

Table 7.2 PAC Cost-Effectiveness Scenario Results.[1]

	2010-2012 Claimed	2013 Claimed	2013-2014 forecast	2015 forecast
Resource Portfolio (less C&S and less ME[2])		2.18	2.12	1.74
Resource and Nonresource Portfolios (less C&S and less ME)		1.84	1.85	1.37
Portfolio with C&S, ME (2013-15 only) and ESPI[3]	2.10	2.30	2.20	1.99

1. Does not include Emerging Technology, OBF revolving loan pool, credit enhancements.
2. ME is Market Effects. Only applies to 2013-2015 pursuant to D. 12-11-015 that adopted 5% spillover for resource programs.
3. Estimated or awarded Energy Savings Performance Incentive payments.
4. 2015 forecast excludes proposed bduget for 2015 Statewide ME&O and New Finance Offering

Southern California Ed

Table 8 - SCE Competi

Program Number
SCE-15-SW-001A
SCE-15-SW-001B
SCE-15-SW-001D
SCE-15-SW-001E
SCE-15-SW-002A
SCE-15-SW-002B
SCE-15-SW-002D
SCE-15-SW-002E
SCE-15-SW-002F
SCE-15-SW-003A
SCE-15-SW-003D
SCE-15-SW-004A
SCE-15-SW-005B
SCE-15-SW-005C
SCE-15-SW-010B
SCE-15-L-001
SCE-15-TP-001
SCE-15-TP-002
SCE-15-TP-003
SCE-15-TP-004
SCE-15-TP-005
SCE-15-TP-006
SCE-15-TP-007
SCE-15-TP-008
SCE-15-TP-009
SCE-15-TP-010
SCE-15-TP-011
SCE-15-TP-015
SCE-15-TP-014
SCE-15-TP-018
SCE-15-TP-019
SCE-15-TP-020
SCE-15-TP-021

[1] Includes all competitive
[2] Pending contract negoti
[3] Excludes SCE administ
[4] Excludes ME&O

ison - Appendix A

tively Solicited Programs [1]

Program Name
California Statewide Program for Residential Energy Efficiency - Energy Advisor Program
California Statewide Program for Residential Energy Efficiency - Plug Load and Appliances Program - A
California Statewide Program for Residential Energy Efficiency - Energy Upgrade California - Middle Inc
California Statewide Program for Residential Energy Efficiency - Residential HVAC Program - Quality M
Statewide Commercial Energy Efficiency Program - Commercial Energy Advisor
Statewide Commercial Energy Efficiency Program - Commercial Calculated Program - Retrocommissioni
Statewide Commercial Energy Efficiency Program - Commercial Direct Install Program
Statewide Commercial Energy Efficiency Program - Commercial Continuous Energy Improvement Progra
Statewide Commercial Energy Efficiency Program - Nonresidential HVAC Program - Quality Maintenanc
Statewide Industrial Energy Efficiency Program - Industrial Energy Advisor Program
Statewide Industrial Energy Efficiency Program - Industrial Continuous Energy Improvement Program
Statewide Agriculture Energy Efficiency Program - Agriculture Energy Advisor Program
Lighting Program - Lighting Innovation Program
Lighting Program - Primary Lighting Program - Torchiere Exchange
Workforce Education & Training - WE&T Connections - LivingWise
Integrated Demand Side Management Pilot for Food Processing
Comprehensive Manufactured Homes
Cool Planet
Healthcare EE Program
Data Center Energy Efficiency
Lodging EE Program
Food & Kindred Products
Primary and Fabricated Metals
Nonmetallic Minerals and Products
Comprehensive Chemical Products
Comprehensive Petroleum Refining
Oil Production
Cool Schools
Commercial Utility Building Efficiency
School Energy Efficiency Program
Sustainable Communities
IDEEA365 Program
Enhanced Retrocommissioning
Total SCE Competitively Solicited Portfolio
Total SCE Noncompetitively Solicited Programs
Total SCE Portfolio [4]

Percentage of Total Portfolio

ely bid programs, including Third Parties, Partnerships, and Core programs.
ations.
rative costs.

2015 Proposed Contract Budget [2,3]	Energy Savings (Gross kWh)	Demand Reduction (Gross kW)	Gas Savings (Gross Therms)	Program Status
$ 4,735,541	11,150,010	5,324	-	Revised
$ 5,261,250	27,058,946	5,096	-	New
$ 2,888,592	1,444,985	452	-	New
$ 300,000	-	-	-	Existing
$ 2,040,000	-	-		Existing
$ 14,565	173,933	14	-	Existing
$ 22,115,875	37,720,659	8,807	-	Existing
$ 280,000	-	-	-	Existing
$ 12,321,409	8,692,222	4,547	-	Existing
$ 270,000	-	-	-	Existing
$ 600,000	-	-	-	Existing
$ 430,000	-	-	-	Existing
$ 500,000	-	-	-	New
$ 500,000	-	-	-	New
$ 2,191,483	964,345	162	-	Existing
$ -	-	-	-	Existing
$ 2,408,247	3,420,799	1,049	-	Existing
$ 120,000	-	-	-	Existing
$ 1,259,330	8,038,999	800	-	Existing
$ 1,786,462	7,034,000	800	-	Existing
$ 1,676,537	5,740,382	714	-	Existing
$ 3,011,127	18,089,100	2,340	-	Existing
$ 3,235,848	18,089,100	3,330	-	Existing
$ 3,725,808	22,607,431	3,269	-	Existing
$ 2,499,450	10,853,100	1,530	-	Existing
$ 842,920	4,521,600	549	-	Existing
$ 2,859,420	18,089,100	2,714	-	Existing
$ 1,730,764	2,341,320	598	-	Existing
$ 1,994,778	7,019,649	2,704	-	Existing
$ 638,028	1,199,910	34	-	Existing
$ 600,000	-	-	-	Existing
$ 3,663,716	6,228,213	918	-	New
$ 770,800	1,809,000	270	-	New
$ 87,271,950	222,286,803	46,021	-	
$ 261,525,616	809,309,787	128,910	-	
$ 348,797,566	998,091,652	174,931	-	

25%	22%	26%	-	

Competitively Solicited Programs by Budget

Total SCE Competitiv	25%
Total SCE Core Progr	75%

Competitively Solicited Programs by Gross kWh

Total SCE Competitiv	#DIV/0!
Total SCE Core Progr	#DIV/0!

Competitively Solicited Programs by Gross kW

Total SCE Competitiv	#DIV/0!
Total SCE Core Progr	#DIV/0!

Program Type	Utility Grouping
Core - SW/3P	Energy Advisor
Core - SW/3P	PLA
Core - SW/3P	Whole House
Core - SW/3P	HVAC
Core - SW/3P	Energy Advisor
Core - SW/3P	Commercial Programs/New Construction
Core - SW/3P	Direct Install
Core - SW/3P	CEI
Core - SW/3P	HVAC
Core - SW/3P	Energy Advisor
Core - SW/3P	CEI
Core - SW/3P	Energy Advisor
Core - SW/3P	Lighting Programs
Core - SW/3P	Lighting Programs
3P	WE&T Programs
3P	Industrial 3P Programs
3P	Residential 3P Programs
3P	Commercial 3P Programs
3P	Commercial 3P Programs
3P	Commercial 3P Programs
3P	Commercial 3P Programs
3P	Industrial 3P Programs
3P	Industrial 3P Programs
3P	Industrial 3P Programs
3P	Industrial 3P Programs
3P	Industrial 3P Programs
3P	Industrial 3P Programs
3P	Commercial 3P Programs
3P	Commercial 3P Programs
3P	Commercial 3P Programs
3P	New Construction
3P	Commercial/Industrial/Agricultural 3P Programs
3P	Commercial 3P Programs

Appendix B

2015 Budget and Savings Placemat Tables

Appendix B.1 – Budget Placemat Table

New/Existing Program #	Main Program Name / Sub-Program Name	Total Administrative Cost: 2013-14 Budget Annualized	Total Administrative Cost: 2013 Spent (Preliminary)	Total Administrative Cost: pre 2013-2014 Carryover spent in 2013	Total Administrative Cost: 2015 Request [2]	Total Marketing & Outreach: 2013-14 Budget Annualized	Total Marketing & Outreach: 2013 Spent (Preliminary)	Total Marketing & Outreach: pre 2013-2014 Carryover spent in 2013	Total Marketing & Outreach: 2015 Request [2]
SCE-15-SW-001	**California Statewide Program for Residential Energy Efficier**	**8,066,746**	**2,218,339**	**(55,720)**	**3,194,838**	**7,881,079**	**3,364,376**	**(56,513)**	**3,830,504**
SCE-15-SW-001A	Energy Advisor Program	2,356,116	769,918	(92,189)	1,210,870	1,200,528	913,313	(17,063)	686,463
SCE-15-SW-001B	Plug Load and Appliances Program	1,362,601	378,901	37,035	530,637	3,958,274	1,574,948	(40,131)	2,037,129
SCE-15-SW-001C	Multifamily Energy Efficiency Rebate Program	1,330,192	250,060	1,223	358,022	499,124	122,737	(20,445)	255,728
SCE-15-SW-001D	Energy Upgrade California	1,229,474	332,554	(41,354)	458,530	1,207,917	288,698	(44,721)	230,202
SCE-15-SW-001E	Residential HVAC Program	360,713	74,483	(4,790)	196,241	413,876	49,790	4,520	212,699
SCE-15-SW-001F	Residential New Construction Program	1,427,651	412,423	44,355	440,538	601,361	414,890	61,327	408,283
SCE-15-SW-002	**Statewide Commercial Energy Efficiency Program**	**10,475,667**	**3,339,008**	**230,587**	**4,977,212**	**4,373,133**	**1,233,387**	**193,776**	**1,562,124**
SCE-15-SW-002A	Commercial Energy Advisor Program	395,340	162,402	46,438	214,292	359,847	61,134	-	162,690
SCE-15-SW-002B	Commercial Calculated Program	879,774	207,127	16,145	350,918	347,494	102,533	5,381	178,584
SCE-15-SW-002C	Commercial Deemed Incentives Program	177,648	41,107	2,851	96,392	488,066	156,328	14,310	250,709
SCE-15-SW-002D	Commercial Direct Install Program	6,937,412	2,451,183	155,939	2,637,654	1,769,665	766,359	162,908	72,034
SCE-15-SW-002E	Commercial Continuous Energy Improvement Program	288,845	55,231	698	157,800	227,521	1,025	(73,020)	153,106
SCE-15-SW-002F	Nonresidential HVAC Program	1,058,055	309,063	8,512	1,119,088	978,889	124,854	28,620	643,951
SCE-15-SW-002G	Savings By Design	738,592	112,895	5	401,068	201,651	21,153	55,577	101,050
SCE-15-SW-003	**Statewide Industrial Energy Efficiency Program**	**980,216**	**223,522**	**12,063**	**539,440**	**757,542**	**168,898**	**23,997**	**398,734**
SCE-15-SW-003A	Industrial Energy Advisor Program	200,474	66,811	3,376	109,389	134,428	120	-	147,658
SCE-15-SW-003B	Industrial Calculated Energy Efficiency Program	392,467	88,752	8,678	214,663	190,882	64,873	23,224	217,393
SCE-15-SW-003C	Industrial Deemed Energy Efficiency Program	227,838	35,176	-	124,482	376,218	103,867	(75)	5,614
SCE-15-SW-003D	Industrial Continuous Energy Improvement Program	159,436	32,783	10	90,906	56,014	39	848	28,069
SCE-15-SW-004	**Statewide Agriculture Energy Efficiency Program**	**979,143**	**183,190**	**299,827**	**548,017**	**252,384**	**83,670**	**2,992**	**120,865**
SCE-15-SW-004A	Agriculture Energy Advisor Program	559,039	106,546	291,945	319,262	86,065	6,838	2,114	35,725
SCE-15-SW-004B	Agriculture Calculated Energy Efficiency Program	286,792	55,095	7,872	156,167	65,409	36,287	879	33,525
SCE-15-SW-004C	Agriculture Deemed Energy Efficiency Program	133,312	21,548	-	72,588	100,910	40,190	-	51,615
SCE-15-SW-004D	Agriculture Continuous Energy Improvement Program	-	-	10	-	-	355	-	-
SCE-15-SW-005	**Lighting Program**	**1,848,659**	**393,848**	**31,920**	**981,059**	**590,233**	**116,081**	**1,233**	**360,370**
SCE-15-SW-005A	Lighting Market Transformation Program	95,269	37,665	1,497	49,635	-	-	-	-
SCE-15-SW-005B	Lighting Innovation Program	487,731	110,179	-	608,440	205,409	41,217	-	164,458
SCE-15-SW-005C	Primary Lighting Program	1,265,660	246,004	30,423	322,984	384,824	74,864	1,233	195,912
SCE-15-SW-006	**Integrated Demand Side Management Program**	**396,700**	**51,991**	**16,039**	**214,586**	**-**	**-**	**-**	**-**
SCE-15-SW-007	**Statewide Finance Program**	**4,868,038**	**877,987**	**(72,586)**	**2,376,151**	**721,854**	**97,442**	**-**	**258,422**
SCE-15-SW-007A	On-Bill Financing	4,272,656	744,561	(72,586)	2,281,346	419,037	57,429	-	215,352
SCE-15-SW-007B	ARRA-Originated Financing	176,278	39,352	-	94,805	83,807	12,583	-	43,070
SCE-15-SW-007C	New Finance Offerings	419,104	94,075	-	-	219,009	27,431	-	-
SCE-15-SW-008	**Codes and Standards Program**	**2,099,948**	**493,086**	**28,586**	**1,135,922**	**427,744**	**2,270**	**-**	**-**
SCE-15-SW-008A	Building Codes and Compliance Advocacy	610,893	129,893	-	330,450	-	-	-	-
SCE-15-SW-008B	Appliance Standards Advocacy	610,896	121,351	26,875	330,450	-	-	-	-
SCE-15-SW-008C	Compliance Improvement	286,357	76,171	1,711	154,898	-	-	-	-
SCE-15-SW-008D	Reach Codes	190,903	63,796	-	103,266	-	-	-	-
SCE-15-SW-008E	Planning and Coordination	400,899	101,875	-	216,858	427,744	2,270	-	-
SCE-15-SW-009	**Emerging Technologies Program**	**3,773,199**	**668,376**	**171,051**	**2,041,021**	**203,687**	**153**	**10,137**	**102,071**
SCE-15-SW-009A	Technology Development Support	666,602	97,870	57,017	360,583	50,922	144	10,137	25,518
SCE-15-SW-009B	Technology Assessments	1,460,602	201,683	57,017	790,076	-	-	-	-
SCE-15-SW-009C	Technology Introduction Support	1,645,995	368,823	57,017	890,362	152,766	9	-	76,553
SCE-15-SW-010	**Workforce Education & Training**	**4,788,873**	**1,222,710**	**259,947**	**1,516,167**	**820,786**	**309,674**	**68,350**	**303,808**
SCE-15-SW-010A	WE&T Centergies	2,229,008	445,286	218,397	181,671	245,569	109,955	9,418	15,311
SCE-15-SW-010B	WE&T Connections	2,546,724	770,356	40,211	1,326,783	575,217	199,718	58,932	288,497
SCE-15-SW-010C	WE&T Planning	13,142	7,067	1,338	7,713	-	-	-	-
SCE-15-L-001	**Integrated Demand Side Management Pilot for Food Process**	**78,779**	**91,514**	**(144)**	**39,051**	**3,623**	**117,912**	**-**	**1,793**
SCE-15-L-002	**Energy Leader Partnership Program**	**8,568,216**	**1,937,406**	**223,082**	**2,599,815**	**1,550,640**	**399,393**	**126,992**	**709,402**
SCE-15-L-002Rollup	Energy Leader Partnership Program	341,898	32,590	3,184	237,245	90,633	3	(16,247)	63,284
SCE-15-L-002A	City of Beaumont Energy Leader Partnership	33,416	11,242	(43)	19,004	15,236	4,564	-	7,635
SCE-15-L-002B	City of Long Beach Energy Leader Partnership	88,166	27,059	(156)	50,220	42,774	489	1,235	21,435
SCE-15-L-002C	City of Redlands Energy Leader Partnership	87,350	32,212	(53)	49,762	15,786	2,986	-	7,910
SCE-15-L-002D	City of Santa Ana Energy Leader Partnership	87,733	34,241	1,319	49,977	144,109	11,268	57,872	72,215
SCE-15-L-002E	City of Simi Valley Energy Leader Partnership	33,416	9,038	(85)	19,004	12,221	2,197	-	6,124
SCE-15-L-002F	Gateway Cities Energy Leader Partnership	238,890	72,274	-	126,489	98,790	19,997	-	36,490
SCE-15-L-002G	Community Energy Leader Partnership	322,820	123,344	1,186	182,352	103,881	54,005	11,690	52,056
SCE-15-L-002H	Eastern Sierra Energy Leader Partnership	82,380	30,975	1,283	46,530	45,300	22,416	4,554	10,003
SCE-15-L-002I	Energy Leader Partnership Strategic Support	239,179	62,957		135,233	44,811	14,533	-	22,456
SCE-15-L-002J	Desert Cities Energy Leader Partnership	157,628	53,695	69,069	86,123	42,266	3,110	7,502	20,006
SCE-15-L-002K	Kern County Energy Leader Partnership	74,671	39,738	(2,333)	39,877	74,307	23,872	(3,529)	33,561
SCE-15-L-002L	Orange County Cities Energy Leader Partnership	377,442	95,826	-	212,839	106,936	23,155	-	39,297
SCE-15-L-002M	San Gabriel Valley Energy Leader Partnership	232,651	83,637	(615)	131,444	70,781	28,617	1,408	35,470
SCE-15-L-002N	San Joaquin Valley Energy Leader Partnership	421,076	120,082	1,872	220,200	154,296	30,890	1,629	69,663
SCE-15-L-002O	South Bay Energy Leader Partnership	359,770	142,016	11,336	202,900	83,003	83,821	14,325	41,594
SCE-15-L-002P	South Santa Barbara County Energy Leader Partnership	234,650	60,628	(2,698)	132,568	111,519	31,989	62	55,884
SCE-15-L-002Q	Ventura County Energy Leader Partnership	441,209	105,315	(3,280)	267,452	42,264	17,490	(1,389)	23,221
SCE-15-L-002R	Western Riverside Energy Leader Partnership	168,504	74,279	4,528	95,383	42,265	10,835	(10,540)	21,180
SCE-15-L-002S	City of Adelanto Energy Leader Partnership	60,789	18,034	(43)	34,611	15,786	2,907	1,235	7,910
SCE-15-L-002T	West Side Energy Leader Partnership	136,722	37,522	988	77,516	21,896	5,429	278	10,973
SCE-15-L-002U	Local Government Strategic Planning Pilot Program	4,347,857	670,701	137,623	183,086	171,779	4,820	56,907	51,035
SCE-15-L-003	**Institutional and Government Core Energy Efficiency Partne**	**1,495,000**	**502,087**	**4,715**	**1,066,127**	**199,614**	**4,880**	**39,040**	**233,997**
SCE-15-L-003A	California Community Colleges Energy Efficiency Partnership	239,104	78,391	(417)	135,620	20,369	69	15,000	34,704
SCE-15-L-003B	California Dept. of Corrections and Rehabilitation EE Partnersh	126,144	48,947	(80)	71,879	-	68	-	510
SCE-15-L-003C	County of Los Angeles Energy Efficiency Partnership	126,756	49,087	(202)	106,629	1,528	68	-	10,717
SCE-15-L-003D	County of Riverside Energy Efficiency Partnership	125,736	48,947	(80)	71,649	1,528	68	1,235	30,111
SCE-15-L-003E	County of San Bernardino Energy Efficiency Partnership	124,920	55,339	(90)	71,190	1,528	68	4,970	29,601
SCE-15-L-003F	State of California Energy Efficiency Partnership	156,273	59,610	-	89,057	1,528	68	-	766
SCE-15-L-003G	UC/CSU Energy Efficiency Partnership	596,068	161,767	5,583	336,532	173,134	4,471	17,835	86,760
SCE-15-L-003H	IGREEN Energy Efficiency Partnership	-	-	-	183,571	-	-	-	40,828
SCE-15-TP-001	**Comprehensive Manufactured Homes**	**1,034,138**	**344,452**	**51,950**	**375,641**	**159,124**	**140,595**	**9,484**	**8,200**
SCE-15-TP-002	**Cool Planet**	**177,688**	**74,918**	**(6)**	**96,612**	**4,889**	**47,764**	**12,000**	**2,450**
SCE-15-TP-003	**Healthcare EE Program**	**534,652**	**244,378**	**56,081**	**288,595**	**48,885**	**117,954**	**69,264**	**24,497**
SCE-15-TP-004	**Data Center Energy Efficiency**	**639,831**	**235,325**	**46,580**	**345,161**	**61,106**	**71,429**	**53,972**	**30,621**
SCE-15-TP-005	**Lodging EE Program**	**432,824**	**256,174**	**91,629**	**284,140**	**26,887**	**107,520**	**58,502**	**13,473**
SCE-15-TP-006	**Food & Kindred Products**	**1,328,763**	**312,282**	**3,069**	**830,243**	**146,655**	**27,012**	**1,575**	**85,740**
SCE-15-TP-007	**Primary and Fabricated Metals**	**1,120,768**	**268,839**	**33,464**	**833,336**	**114,065**	**21,952**	**8,938**	**85,740**
SCE-15-TP-008	**Nonmetallic Minerals and Products**	**956,514**	**267,132**	**18,158**	**698,853**	**90,660**	**94,862**	**17,526**	**81,657**
SCE-15-TP-009	**Comprehensive Chemical Products**	**1,072,119**	**360,921**	**137,599**	**621,159**	**114,065**	**21,560**	**18,216**	**97,988**
SCE-15-TP-010	**Comprehensive Petroleum Refining**	**349,983**	**216,264**	**18,689**	**214,771**	**30,392**	**52,366**	**19,576**	**13,473**
SCE-15-TP-011	**Oil Production**	**863,260**	**382,684**	**368,903**	**465,867**	**81,475**	**70,593**	**108,351**	**40,828**
SCE-15-TP-012	**Refinery Energy Efficiency Program**	**1,275,224**	**294,510**	**103,505**	**-**	**48,885**	**67,356**	**78,905**	**-**
SCE-15-TP-013	**Cool Schools**	**616,191**	**300,270**	**255,081**	**1,152,149**	**56,006**	**32,453**	**3,621**	**193,935**
SCE-15-TP-014	**Commercial Utility Building Efficiency**	**673,918**	**212,949**	**8,469**	**596,885**	**57,468**	**3**	**(9,015)**	**81,862**
SCE-15-TP-017	**Energy Efficiency for Entertainment Centers**	**473,597**	**126,458**	**(403)**	**-**	**32,590**	**2**	**-**	**-**
SCE-15-TP-018	**School Energy Efficiency Program**	**1,316,679**	**416,226**	**772,446**	**95,363**	**130,360**	**8**	**427,324**	**9,092**
SCE-15-TP-019	**Sustainable Communities**	**872,695**	**159,085**	**4,096**	**475,299**	**19,350**	**55,343**	**-**	**9,697**
SCE-15-TP-020	**IDEEA365 Program**	**1,427,967**	**189,408**	**-**	**772,426**	**162,950**	**10**	**-**	**81,657**
SCE-15-TP-021	**Enhanced Retrocommissioning**	**325,275**	**422**	**(751)**	**176,529**	**25,461**	**144**	**-**	**12,759**
	Retail Energy Action Program			**8,134**					
	Outreach/Statewide ME&O (Pre 2013)			**26,054**				**1,086,649**	
EM&V	**EM&V**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
	Total SCE Portfolio	**63,911,272**	**16,865,761**	**3,152,115**	**29,552,435**	**19,193,591**	**6,827,061**	**2,374,890**	**8,755,759**
	SoCalREN	2,768,848	146,050		2,136,065	1,714,502	-		1,950,537
	Total SCE 2015 Portfolio	**66,680,119**	**17,011,811**	**3,152,115**	**31,688,500**	**20,908,093**	**6,827,061**	**2,374,890**	**10,706,296**
	ME&O				176,800				44,200
	New Finance Offerings (2015)				104,000				75,000
	Total SCE 2015 Portfolio	**66,680,119**	**17,011,811**	**3,152,115**	**31,969,300**	**20,908,093**	**6,827,061**	**2,374,890**	**10,825,496**

1. EE portion of funding for statewide marketing, education and outreach was approved in Phase 1 Flex Alert D.13-04-021 for 2013-2014; and in Phase 2 SW ME&O D.13-12-038 for 2014-2015, in A. 12-08-007, et. al. The SWME&O budget is outside the 4% marketing cap and included in total EE portfolio cost effectiveness.
2. 2015 budget request includes funds from all sources including unspent funds

Appendix B.2- Savings Placemat Table and Cost Effectiveness Table

Gross kWh Energy Savings [4]

New Program #	Main Program Name / Sub-Program Name	2013 Forecast (Compliance Filing)	2013 Claimed (Preliminary)	2013 Claimed from pre-2013 Carryover (Preliminary)	2014	2015	2015 % of Total Gross Program Savings
SCE-15-SW-001	**California Statewide Program for Residential Energy Efficiency**	**86,121,195**	**58,552,004**	**5,221,880**	**87,032,630**	**76,553,801**	**7%**
SCE-15-SW-001A	Energy Advisor Program	5,077,228	12,017,519	-	5,077,228	11,150,010	1%
SCE-15-SW-001B	Plug Load and Appliances Program	35,066,162	35,170,366	1,659,677	35,112,437	32,789,539	3%
SCE-15-SW-001C	Multifamily Energy Efficiency Rebate Program	41,293,630	8,376,162	2,536,721	42,290,622	26,788,917	3%
SCE-15-SW-001D	Energy Upgrade California	3,556,825	702,404	-	3,626,904	3,435,154	0%
SCE-15-SW-001E	Residential HVAC Program	63,628	1,275,412	-	-	1,589,294	0%
SCE-15-SW-001F	Residential New Construction Program	1,063,723	1,010,143	1,025,483	925,439	800,888	0%
SCE-15-SW-002	**Statewide Commercial Energy Efficiency Program**	**317,188,817**	**252,214,170**	**62,132,335**	**285,347,929**	**193,228,591**	**18%**
SCE-15-SW-002A	Commercial Energy Advisor Program	-	-	-	-	-	0%
SCE-15-SW-002B	Commercial Calculated Program	42,006,015	62,593,772	4,505,988	51,031,854	31,000,098	3%
SCE-15-SW-002C	Commercial Deemed Incentives Program	127,974,990	41,650,529	25,917,911	93,276,986	49,889,941	5%
SCE-15-SW-002D	Commercial Direct Install Program	27,259,928	88,898,904	288,927	36,061,579	37,720,659	4%
SCE-15-SW-002E	Commercial Continuous Energy Improvement Program	-	-	-	-	-	0%
SCE-15-SW-002F	Nonresidential HVAC Program	79,447,884	46,870,165	2,998,050	60,427,509	41,715,597	4%
SCE-15-SW-002G	Savings By Design	40,500,000	12,200,799	28,421,460	44,550,000	32,902,296	3%
SCE-15-SW-003	**Statewide Industrial Energy Efficiency Program**	**102,355,730**	**7,570,044**	**20,600,445**	**86,722,532**	**15,487,954**	**1%**
SCE-15-SW-003A	Industrial Energy Advisor Program	-	-	-	-	-	0%
SCE-15-SW-003B	Industrial Calculated Energy Efficiency Program	59,373,553	3,133,114	18,096,764	61,136,198	11,213,008	1%
SCE-15-SW-003C	Industrial Deemed Energy Efficiency Program	42,982,177	4,436,930	2,503,681	25,586,334	4,274,947	0%
SCE-15-SW-003D	Industrial Continuous Energy Improvement Program	-	-	-	-	-	0%
SCE-15-SW-004	**Statewide Agriculture Energy Efficiency Program**	**16,942,753**	**25,333,478**	**399,687**	**18,014,830**	**13,265,895**	**1%**
SCE-15-SW-004A	Agriculture Energy Advisor Program	9,000,000	11,645,838	-	9,000,000	9,000,000	1%
SCE-15-SW-004B	Agriculture Calculated Energy Efficiency Program	5,674,867	13,550,788	135,121	6,746,944	2,631,445	0%
SCE-15-SW-004C	Agriculture Deemed Energy Efficiency Program	2,267,886	136,853	264,567	2,267,886	1,634,450	0%
SCE-15-SW-004D	Agriculture Continuous Energy Improvement Program	-	-	-	-	-	0%
SCE-15-SW-005	**Lighting Program**	**113,782,306**	**210,960,586**	**-**	**145,864,109**	**220,565,070**	**21%**
SCE-15-SW-005A	Lighting Market Transformation Program	-	-	-	-	-	0%
SCE-15-SW-005B	Lighting Innovation Program	37,360,560	81,895	-	43,798,830	33,121,058	3%
SCE-15-SW-005C	Primary Lighting Program	76,421,746	210,878,692	-	102,065,279	187,444,013	18%
SCE-15-SW-006	**Integrated Demand Side Management Program**	-	-	-	-	-	0%
SCE-15-SW-007	**Statewide Finance Program**	-	-	-	-	-	0%
SCE-15-SW-007A	On-Bill Financing	-	-	-	-	-	0%
SCE-15-SW-007B	ARRA-Originated Financing	-	-	-	-	-	0%
SCE-15-SW-007C	New Finance Offerings	-	-	-	-	-	0%
SCE-15-SW-008	**Codes and Standards Program**	-	-	-	-	-	0%
SCE-15-SW-008A	Building Codes and Compliance Advocacy	-	-	-	-	-	0%
SCE-15-SW-008B	Appliance Standards Advocacy	-	-	-	-	-	0%
SCE-15-SW-008C	Compliance Improvement	-	-	-	-	-	0%
SCE-15-SW-008D	Reach Codes	-	-	-	-	-	0%
SCE-15-SW-008E	Planning and Coordination	-	-	-	-	-	0%
SCE-15-SW-009	**Emerging Technologies Program**	-	-	-	-	-	0%
SCE-15-SW-009A	Technology Development Support	-	-	-	-	-	0%
SCE-15-SW-009B	Technology Assessments	-	-	-	-	-	0%
SCE-15-SW-009C	Technology Introduction Support	-	-	-	-	-	0%
SCE-15-SW-010	**Workforce Education & Training**	**1,028,804**	**1,153,792**	**204**	**1,028,804**	**964,345**	**0%**
SCE-15-SW-010A	WE&T Centergies	-	-	-	-	-	0%
SCE-15-SW-010B	WE&T Connections	1,028,804	1,153,792	204	1,028,804	964,345	0%
SCE-15-SW-010C	WE&T Planning	-	-	-	-	-	0%
SCE-15-L-001	**Integrated Demand Side Management Pilot for Food Processing**	-	-	-	-	-	0%
SCE-15-L-002	**Energy Leader Partnership Program**	**16,278,671**	**3,223,318**	**12,581,340**	**24,019,146**	**23,156,871**	**2%**
SCE-15-L-002Rollup	Energy Leader Partnership Program	794,180	-	-	1,677,733	2,111,423	0%
SCE-15-L-002A	City of Beaumont Energy Leader Partnership	36,000	31,855	-	144,000	139,500	0%
SCE-15-L-002B	City of Long Beach Energy Leader Partnership	414,000	-	571,985	1,062,000	1,026,000	0%
SCE-15-L-002C	City of Redlands Energy Leader Partnership	486,000	112,990	342,212	1,134,000	306,000	0%
SCE-15-L-002D	City of Santa Ana Energy Leader Partnership	297,895	528,997	-	959,138	1,588,746	0%
SCE-15-L-002E	City of Simi Valley Energy Leader Partnership	32,505	11,754	-	71,990	161,605	0%
SCE-15-L-002F	Gateway Cities Energy Leader Partnership	863,516	147,538	74,212	1,329,224	1,849,313	0%
SCE-15-L-002G	Community Energy Leader Partnership	3,989,938	1,137,651	2,518,832	3,989,933	3,884,423	0%
SCE-15-L-002H	Eastern Sierra Energy Leader Partnership	41,312	-	103	14,133	80,100	0%
SCE-15-L-002I	Energy Leader Partnership Strategic Support	-	-	-	-	-	0%
SCE-15-L-002J	Desert Cities Energy Leader Partnership	439,038	240,990	2,010,850	750,041	694,593	0%
SCE-15-L-002K	Kern County Energy Leader Partnership	33,750	-	167,454	101,250	27,549	0%
SCE-15-L-002L	Orange County Cities Energy Leader Partnership	1,366,542	214,868	2,286,134	3,236,381	2,604,245	0%
SCE-15-L-002M	San Gabriel Valley Energy Leader Partnership	1,774,403	-	769,334	1,775,718	1,504,075	0%
SCE-15-L-002N	San Joaquin Valley Energy Leader Partnership	1,758,200	75,974	1,046,494	3,153,840	1,781,621	0%
SCE-15-L-002O	South Bay Energy Leader Partnership	1,225,501	10,495	50,022	2,194,502	1,597,503	0%
SCE-15-L-002P	South Santa Barbara County Energy Leader Partnership	827,732	310,613	61,880	602,005	670,640	0%
SCE-15-L-002Q	Ventura County Energy Leader Partnership	449,418	146,406	416,046	663,721	1,732,500	0%
SCE-15-L-002R	Western Riverside Energy Leader Partnership	540,000	193,047	40,289	810,000	774,000	0%
SCE-15-L-002S	City of Adelanto Energy Leader Partnership	627,064	-	2,212,837	67,858	243,038	0%
SCE-15-L-002T	West Side Energy Leader Partnership	281,678	60,141	12,655	281,679	379,997	0%
SCE-15-L-002U	Local Government Strategic Planning Pilot Program	-	-	-	-	-	0%
SCE-15-L-003	**Institutional and Government Core Energy Efficiency Partnership**	**14,655,555**	**4,334,258**	**19,764,924**	**30,755,550**	**28,291,062**	**3%**
SCE-15-L-003A	California Community Colleges Energy Efficiency Partnership	5,607,280	1,777,315	3,678,960	5,607,281	5,850,000	1%
SCE-15-L-003B	California Dept. of Corrections and Rehabilitation EE Partnership	3,452,572	-	46,324	1,795,347	1,532,133	0%
SCE-15-L-003C	County of Los Angeles Energy Efficiency Partnership	2,021,783	54,047	5,070,215	2,021,780	2,155,500	0%
SCE-15-L-003D	County of Riverside Energy Efficiency Partnership	623,311	59,172	105,771	1,283,466	927,000	0%
SCE-15-L-003E	County of San Bernardino Energy Efficiency Partnership	729,410	656,267	98,933	1,177,367	927,738	0%
SCE-15-L-003F	State of California Energy Efficiency Partnership	2,221,200	504,071	700,965	3,574,800	1,912,265	0%
SCE-15-L-003G	UC/CSU Energy Efficiency Partnership	-	1,283,386	10,063,756	15,295,509	10,350,951	1%
SCE-15-L-003H	IGREEN Energy Efficiency Partnership	-	-	-	-	4,635,476	0%
SCE-15-TP-001	**Comprehensive Manufactured Homes**	**2,619,766**	**2,878,297**	**-**	**2,619,766**	**3,420,799**	**0%**
SCE-15-TP-002	**Cool Planet**	-	-	-	-	-	0%
SCE-15-TP-003	**Healthcare EE Program**	**6,882,643**	**-**	**2,815,713**	**6,882,643**	**8,038,999**	**1%**
SCE-15-TP-004	**Data Center Energy Efficiency**	**9,442,789**	**-**	**4,350,457**	**9,442,789**	**7,034,000**	**1%**
SCE-15-TP-005	**Lodging EE Program**	**8,914,393**	**1,208,788**	**983,839**	**8,914,393**	**5,740,382**	**1%**
SCE-15-TP-006	**Food & Kindred Products**	**23,612,522**	**387,193**	**13,586,698**	**23,612,522**	**18,089,100**	**2%**
SCE-15-TP-007	**Primary and Fabricated Metals**	**22,992,959**	**-**	**6,459,420**	**22,992,959**	**18,089,100**	**2%**
SCE-15-TP-008	**Nonmetallic Minerals and Products**	**8,653,155**	**-**	**15,590,427**	**26,928,429**	**22,607,431**	**2%**
SCE-15-TP-009	**Comprehensive Chemical Products**	**15,316,727**	**341,381**	**10,886,840**	**15,316,727**	**10,853,100**	**1%**
SCE-15-TP-010	**Comprehensive Petroleum Refining**	**13,328,587**	**1,024,342**	**361,168**	**13,328,587**	**4,521,600**	**0%**
SCE-15-TP-011	**Oil Production**	**15,788,436**	**5,631,144**	**25,102,582**	**15,788,436**	**18,089,100**	**2%**
SCE-15-TP-012	**Refinery Energy Efficiency Program**	**11,256,580**	**67,108**	**1,701,165**	**11,256,580**	**-**	**0%**
SCE-15-TP-013	**Cool Schools**	-	-	**410,392**	**5,960,197**	**2,341,320**	**0%**
SCE-15-TP-014	**Commercial Utility Building Efficiency**	**8,283,196**	**72,079**	**3,935,051**	**14,095,497**	**7,019,649**	**1%**
SCE-15-TP-017	**Energy Efficiency for Entertainment Centers**	**1,741,666**	**-**	**-**	**1,741,666**	**-**	**0%**
SCE-15-TP-018	**School Energy Efficiency Program**	**10,172,676**	**-**	**7,868,408**	**10,172,676**	**1,199,910**	**0%**
SCE-15-TP-019	**Sustainable Communities**	-	-	-	-	-	0%
SCE-15-TP-020	**IDEEA365 Program**	**6,228,213**	**-**	**-**	**6,228,213**	**6,228,213**	**1%**
SCE-15-TP-021	**Enhanced Retrocommissioning**	**2,475,000**	**-**	**-**	**2,475,000**	**1,809,000**	**0%**
	Monitoring-Based Commissioning			**3,109,929**			0%
	Monitoring-Based Persistence Commissioning Program			**549,034**			0%
LIEE	**Energy Savings Assistance**	**34,538,106**	**32,273,102**	**-**	**33,504,938**	**33,504,938**	**3%**
	Total SCE Portfolio - Gross Savings [1]	**870,601,246**	**607,225,084**	**218,411,938**	**910,047,547**	**740,100,232**	**70%**
Other	**Codes & Standards Advocacy Net Savings [2]**	**262,099,964**	**262,099,964**	**-**	**246,317,235**	**291,495,893**	**27%**
Other	**CFL Carryover**	**-**	**58,630,930**	**-**	**-**	**-**	**0%**
	Total SCE Portfolio	**1,132,701,210**	**927,955,978**	**218,411,938**	**1,156,364,782**	**1,031,596,124**	**97%**
	SoCalREN	**29,520,321**	**-**	**-**	**24,800,908**	**40,643,727**	**3%**
	Total SCE EE Portfolio [5,6,7, & 8 for TRC and PAC]	**1,162,221,531**	**927,955,978**	**218,411,938**	**1,181,165,690**	**1,072,239,851**	**100%**

Gross kW Energy Savings [4]

New Program #	2013 Forecast (Compliance Filing)	2013 Claimed (Preliminary)	2013 Claimed from pre-2013 Carryover (Preliminary)	2014	2015	2015 % of Total Gross Program Savings
SCE-15-SW-001	19,839	16,760	1,563	19,574	19,809	10%
SCE-15-SW-001A	2,294	5,689	-	2,294	5,324	3%
SCE-15-SW-001B	6,536	7,265	308	6,538	6,613	3%
SCE-15-SW-001C	6,503	451	180	6,614	2,258	1%
SCE-15-SW-001D	2,437	910	-	2,444	2,322	1%
SCE-15-SW-001E	133	1,348	-	-	1,873	1%
SCE-15-SW-001F	1,936	1,097	1,075	1,684	1,418	1%
SCE-15-SW-002	68,475	49,631	11,818	59,772	41,065	21%
SCE-15-SW-002A	-	-	-	-	-	0%
SCE-15-SW-002B	7,322	8,590	229	8,456	4,542	2%
SCE-15-SW-002C	26,145	7,419	3,808	19,059	8,240	4%
SCE-15-SW-002D	6,025	21,051	69	7,971	8,807	4%
SCE-15-SW-002E	-	-	-	-	-	0%
SCE-15-SW-002F	21,782	10,265	505	16,366	12,572	6%
SCE-15-SW-002G	7,200	2,305	7,206	7,920	6,904	4%
SCE-15-SW-003	19,764	1,928	2,721	14,907	2,555	1%
SCE-15-SW-003A	-	-	-	-	-	0%
SCE-15-SW-003B	7,307	522	2,013	7,492	1,495	1%
SCE-15-SW-003C	12,458	1,405	708	7,416	1,059	1%
SCE-15-SW-003D	-	-	-	-	-	0%
SCE-15-SW-004	4,471	5,413	94	4,614	2,860	1%
SCE-15-SW-004A	2,237	2,682	-	2,237	2,076	1%
SCE-15-SW-004B	1,515	2,689	41	1,658	360	0%
SCE-15-SW-004C	718	42	53	718	423	0%
SCE-15-SW-004D	-	-	-	-	-	0%
SCE-15-SW-005	18,922	30,242	-	25,188	34,956	18%
SCE-15-SW-005A	-	-	-	-	-	0%
SCE-15-SW-005B	6,560	19	-	7,835	7,657	4%
SCE-15-SW-005C	12,362	30,223	-	17,352	27,299	14%
SCE-15-SW-006	-	-	-	-	-	0%
SCE-15-SW-007	-	-	-	-	-	0%
SCE-15-SW-007A	-	-	-	-	-	0%
SCE-15-SW-007B	-	-	-	-	-	0%
SCE-15-SW-007C	-	-	-	-	-	0%
SCE-15-SW-008	-	-	-	-	-	0%
SCE-15-SW-008A	-	-	-	-	-	0%
SCE-15-SW-008B	-	-	-	-	-	0%
SCE-15-SW-008C	-	-	-	-	-	0%
SCE-15-SW-008D	-	-	-	-	-	0%
SCE-15-SW-008E	-	-	-	-	-	0%
SCE-15-SW-009	-	-	-	-	-	0%
SCE-15-SW-009A	-	-	-	-	-	0%
SCE-15-SW-009B	-	-	-	-	-	0%
SCE-15-SW-009C	-	-	-	-	-	0%
SCE-15-SW-010	130	175	0	130	162	0%
SCE-15-SW-010A	-	-	-	-	-	0%
SCE-15-SW-010B	130	175	0	130	162	0%
SCE-15-SW-010C	-	-	-	-	-	0%
SCE-15-L-001	-	-	-	-	-	0%
SCE-15-L-002	2,935	600	1,936	4,022	2,310	1%
SCE-15-L-002Rollup	76	-	-	358	79	0%
SCE-15-L-002A	11	8	-	30	20	0%
SCE-15-L-002B	22	-	94	232	151	0%
SCE-15-L-002C	118	26	53	166	66	0%
SCE-15-L-002D	67	1	-	248	170	0%
SCE-15-L-002E	7	5	-	18	8	0%
SCE-15-L-002F	59	35	17	77	204	0%
SCE-15-L-002G	1,002	213	301	1,002	239	0%
SCE-15-L-002H	3	-	0	1	17	0%
SCE-15-L-002I	-	-	-	-	-	0%
SCE-15-L-002J	66	53	393	149	177	0%
SCE-15-L-002K	8	-	20	16	3	0%
SCE-15-L-002L	63	58	472	66	21	0%
SCE-15-L-002M	6	-	105	6	48	0%
SCE-15-L-002N	551	31	157	800	264	0%
SCE-15-L-002O	285	3	11	374	398	0%
SCE-15-L-002P	231	74	-	149	64	0%
SCE-15-L-002Q	127	32	55	164	197	0%
SCE-15-L-002R	85	39	6	109	126	0%
SCE-15-L-002S	100	-	251	11	1	0%
SCE-15-L-002T	47	24	2	47	57	0%
SCE-15-L-002U	-	-	-	-	-	0%
SCE-15-L-003	2,832	453	3,265	6,394	4,019	2%
SCE-15-L-003A	1,557	166	1,213	1,557	1,067	1%
SCE-15-L-003B	411	-	23	286	96	0%
SCE-15-L-003C	319	18	504	319	215	0%
SCE-15-L-003D	128	23	63	192	167	0%
SCE-15-L-003E	169	17	16	266	127	0%
SCE-15-L-003F	249	120	187	358	333	0%
SCE-15-L-003G	-	109	1,259	3,416	1,383	1%
SCE-15-L-003H	-	-	-	-	631	0%
SCE-15-TP-001	1,129	1,779	-	1,129	1,049	1%
SCE-15-TP-002	-	-	-	-	-	0%
SCE-15-TP-003	1,032	-	496	1,032	800	0%
SCE-15-TP-004	1,278	-	574	1,278	800	0%
SCE-15-TP-005	1,270	173	158	1,270	714	0%
SCE-15-TP-006	2,665	38	1,252	2,665	2,340	1%
SCE-15-TP-007	2,658	-	799	2,658	3,330	2%
SCE-15-TP-008	1,119	-	2,337	3,484	3,269	2%
SCE-15-TP-009	3,063	65	1,504	3,063	1,530	1%
SCE-15-TP-010	1,583	92	57	1,583	549	0%
SCE-15-TP-011	2,369	653	2,979	2,369	2,714	1%
SCE-15-TP-012	1,919	-	251	1,919	-	0%
SCE-15-TP-013	-	-	115	228	598	0%
SCE-15-TP-014	1,450	16	547	3,520	2,704	1%
SCE-15-TP-017	1,409	-	-	1,409	-	0%
SCE-15-TP-018	147	-	1,485	147	34	0%
SCE-15-TP-019	-	-	-	-	-	0%
SCE-15-TP-020	918	-	-	918	918	0%
SCE-15-TP-021	270	-	-	270	270	0%
Monitoring-Based Commissioning			562			0%
Monitoring-Based Persistence Commissioning Program			14			0%
LIEE	7,766	9,512	-	7,539	7,539	4%
Total SCE Portfolio - Gross Savings [1]	169,413	117,530	34,526	171,081	136,894	69%
Codes & Standards Advocacy Net Savings [2]	31,534	31,534	-	33,482	45,577	23%
CFL Carryover	-	5,998	-	-	-	0%
Total SCE Portfolio	200,947	155,061	34,526	204,563	182,470	93%
SoCalREN	14,318	-	-	11,084	18,165	7%
Total SCE EE Portfolio [5,6,7, & 8 for TRC and PAC]	215,265	155,061	34,526	215,647	200,636	100%

TRC and PAC

New Program #	TRC 2013 Claimed (Preliminary)	TRC 2013-2014	TRC 2015	PAC 2013 Claimed (preliminary)	PAC 2013-2014	PAC 2015
SCE-15-SW-001	0.54	1.00	0.73	0.93	1.49	0.83
SCE-15-SW-001A	0.60	0.15	0.18	0.60	0.23	0.21
SCE-15-SW-001B	0.90	0.55	0.67	1.22	0.84	0.81
SCE-15-SW-001C	1.67	2.41	2.12	1.73	3.85	2.27
SCE-15-SW-001D	0.12	0.49	0.41	0.22	0.67	0.39
SCE-15-SW-001E	0.12	0.01	0.35	0.57	0.01	0.45
SCE-15-SW-001F	0.65	0.37	0.29	0.74	0.52	0.39
SCE-15-SW-002	1.49	2.02	1.46	2.35	2.92	1.87
SCE-15-SW-002A	-	-	-	-	-	-
SCE-15-SW-002B	1.29	1.59	1.15	5.13	3.46	2.73
SCE-15-SW-002C	1.85	2.40	1.64	3.73	4.70	3.08
SCE-15-SW-002D	1.26	1.32	1.42	1.31	1.42	1.52
SCE-15-SW-002E	-	-	-	-	-	-
SCE-15-SW-002F	1.47	2.34	1.40	2.13	2.87	1.53
SCE-15-SW-002G	2.79	2.52	2.84	3.65	3.42	3.72
SCE-15-SW-003	1.15	2.79	1.16	3.51	4.17	1.56
SCE-15-SW-003A	-	-	-	-	-	-
SCE-15-SW-003B	1.01	2.41	1.23	4.44	4.12	1.70
SCE-15-SW-003C	2.45	4.91	1.39	3.22	6.63	1.83
SCE-15-SW-003D	-	-	-	-	-	-
SCE-15-SW-004	0.47	1.01	0.51	2.67	1.73	1.23
SCE-15-SW-004A	0.91	0.68	0.70	2.23	1.26	1.25
SCE-15-SW-004B	0.37	1.62	0.23	3.28	2.24	1.26
SCE-15-SW-004C	0.48	1.65	1.46	0.62	3.72	1.61
SCE-15-SW-004D	-	-	-	-	-	-
SCE-15-SW-005	3.35	2.39	1.62	6.22	3.41	2.74
SCE-15-SW-005A	-	-	-	-	-	-
SCE-15-SW-005B	0.09	3.13	1.73	0.09	4.31	2.78
SCE-15-SW-005C	3.44	2.06	1.61	6.53	3.02	2.77
SCE-15-SW-006	-	-	-	-	-	-
SCE-15-SW-007	-	-	-	-	-	-
SCE-15-SW-007A	-	-	-	-	-	-
SCE-15-SW-007B	-	-	-	-	-	-
SCE-15-SW-007C	-	-	-	-	-	-
SCE-15-SW-008	-	-	-	-	-	-
SCE-15-SW-008A	-	-	-	-	-	-
SCE-15-SW-008B	-	-	-	-	-	-
SCE-15-SW-008C	-	-	-	-	-	-
SCE-15-SW-008D	-	-	-	-	-	-
SCE-15-SW-008E	-	-	-	-	-	-
SCE-15-SW-009	-	-	-	-	-	-
SCE-15-SW-009A	-	-	-	-	-	-
SCE-15-SW-009B	-	-	-	-	-	-
SCE-15-SW-009C	-	-	-	-	-	-
SCE-15-SW-010	0.04	0.07	0.05	0.04	0.07	0.05
SCE-15-SW-010A	-	-	-	-	-	-
SCE-15-SW-010B	0.11	0.18	0.13	0.11	0.18	0.13
SCE-15-SW-010C	-	-	-	-	-	-
SCE-15-L-001	-	-	-	-	-	-
SCE-15-L-002	0.76	0.78	1.03	1.20	0.92	1.30
SCE-15-L-002Rollup	-	0.89	1.06	-	1.21	1.55
SCE-15-L-002A	0.36	0.61	1.17	0.36	0.69	1.21
SCE-15-L-002B	1.97	1.54	1.07	2.06	2.03	1.75
SCE-15-L-002C	0.55	1.42	1.39	1.17	1.79	1.70
SCE-15-L-002D	0.46	1.07	1.06	1.80	1.23	2.40
SCE-15-L-002E	0.09	0.37	0.71	0.11	0.42	1.02
SCE-15-L-002F	0.52	0.98	1.29	0.65	1.29	2.44
SCE-15-L-002G	0.78	1.25	1.19	1.36	1.78	1.46
SCE-15-L-002H	0.00	0.08	0.44	0.00	0.08	0.45
SCE-15-L-002I	-	-	-	-	-	-
SCE-15-L-002J	0.22	0.70	1.12	0.24	0.84	1.50
SCE-15-L-002K	0.47	0.22	0.08	0.62	0.23	0.08
SCE-15-L-002L	3.40	1.00	1.02	8.88	1.36	1.11
SCE-15-L-002M	0.38	1.46	1.22	0.67	1.60	1.39
SCE-15-L-002N	0.51	1.36	1.60	1.20	1.66	1.87
SCE-15-L-002O	0.07	0.89	1.08	0.08	1.06	0.99
SCE-15-L-002P	0.51	1.06	1.26	0.84	1.58	1.33
SCE-15-L-002Q	0.40	0.51	0.99	0.69	0.59	1.25
SCE-15-L-002R	0.34	0.80	1.01	0.46	0.86	1.29
SCE-15-L-002S	3.76	1.38	0.74	4.81	1.42	1.34
SCE-15-L-002T	0.29	0.75	1.05	0.32	0.88	0.99
SCE-15-L-002U	-	-	-	-	-	-
SCE-15-L-003	0.82	1.30	1.10	1.39	1.44	1.50
SCE-15-L-003A	0.81	1.11	0.84	1.61	1.40	1.61
SCE-15-L-003B	0.27	1.68	0.80	0.26	1.38	2.05
SCE-15-L-003C	2.27	0.85	1.02	3.61	1.13	1.36
SCE-15-L-003D	0.68	0.93	0.97	0.68	0.88	1.57
SCE-15-L-003E	0.76	1.08	1.04	1.32	1.16	1.51
SCE-15-L-003F	2.27	2.08	0.96	3.66	1.92	2.08
SCE-15-L-003G	0.80	1.47	1.41	2.29	1.58	1.91
SCE-15-L-003H	-	-	1.30	-	-	1.96
SCE-15-TP-001	0.71	1.14	1.04	0.74	1.18	1.08
SCE-15-TP-002	-	-	-	-	-	-
SCE-15-TP-003	0.95	1.72	2.02	1.46	2.97	3.66
SCE-15-TP-004	1.09	1.46	1.29	2.82	2.46	1.88
SCE-15-TP-005	0.91	1.75	1.51	0.85	2.55	2.10
SCE-15-TP-006	2.27	2.30	2.40	3.80	3.33	3.17
SCE-15-TP-007	0.94	2.39	2.54	2.23	3.23	3.25
SCE-15-TP-008	1.51	2.49	2.13	2.58	3.11	3.11
SCE-15-TP-009	1.81	2.16	1.93	3.58	2.43	2.41
SCE-15-TP-010	0.58	2.37	2.28	0.79	2.76	2.88
SCE-15-TP-011	1.76	2.68	3.17	3.54	2.54	4.02
SCE-15-TP-012	0.62	1.97	-	0.88	1.91	-
SCE-15-TP-013	0.18	0.88	0.94	0.36	1.23	0.90
SCE-15-TP-014	1.62	1.78	2.72	4.19	4.54	3.02
SCE-15-TP-017	-	2.56	-	-	2.65	-
SCE-15-TP-018	0.81	1.56	0.88	0.84	1.63	0.91
SCE-15-TP-019	-	-	-	-	-	-
SCE-15-TP-020	-	1.29	1.29	-	1.34	1.34
SCE-15-TP-021	-	2.11	1.32	-	3.03	1.59
Monitoring-Based Commissioning						
Monitoring-Based Persistence Commissioning Program						
LIEE	-	-	-	-	-	-
Total SCE Portfolio - Gross Savings [1]	1.12	1.41	1.09	1.81	1.81	1.37
Codes & Standards Advocacy Net Savings [2]	5.04	4.53	5.93	-	25.44	-
CFL Carryover	-	-	-	-	-	-
Total SCE Portfolio	1.34	4.53	1.47	2.30	2.23	2.02
SoCalREN	-	-	-	-	-	-
Total SCE EE Portfolio [5,6,7, & 8 for TRC and PAC]	1.34	1.57	1.37	2.30	2.12	1.84

Ratio of Net Energy Savings to Gross Energy Savings / Average Energy Savings EUL (savings weighted)

New Program #	net/gross kWh 2013 Claimed (Preliminary)	net/gross kWh 2013-2014	net/gross kWh 2015	net/gross kW 2013 Claimed (Preliminary)	net/gross kW 2013-2014	net/gross kW 2015	EUL kWH 2013 Claimed (Preliminary)	EUL kWH 2013-2014	EUL kWH 2015
SCE-15-SW-001	0.69	0.64	0.70	0.59	0.60	0.65	9.26	9.37	8.33
SCE-15-SW-001A	0.58	0.55	0.58	0.58	0.55	0.58	3.00	3.00	3.00
SCE-15-SW-001B	0.78	0.55	0.57	0.79	0.55	0.57	13.79	7.56	6.19
SCE-15-SW-001C	0.85	0.74	0.89	0.79	0.60	0.88	14.06	11.89	12.86
SCE-15-SW-001D	0.58	0.85	0.89	0.58	0.85	0.89	14.00	8.55	6.29
SCE-15-SW-001E	0.66	0.55	0.62	0.60	0.55	0.61	9.96	15.00	15.00
SCE-15-SW-001F	0.55	0.60	0.63	0.55	0.60	0.63	14.32	14.00	14.00
SCE-15-SW-002	0.78	0.67	0.75	0.78	0.70	0.77	12.92	10.47	11.22
SCE-15-SW-002A	-	-	-	-	-	-	-	-	-
SCE-15-SW-002B	0.74	0.66	0.69	0.72	0.65	0.69	13.23	5.39	6.42
SCE-15-SW-002C	0.73	0.62	0.66	0.74	0.62	0.67	10.98	11.27	10.21
SCE-15-SW-002D	0.92	0.86	0.93	0.92	0.87	0.93	11.83	4.48	10.03
SCE-15-SW-002E	-	-	-	-	-	-	-	-	-
SCE-15-SW-002F	0.69	0.73	0.73	0.69	0.78	0.76	15.96	13.09	14.24
SCE-15-SW-002G	0.70	0.60	0.76	0.70	0.60	0.76	14.43	14.09	14.78
SCE-15-SW-003	0.75	0.64	0.67	0.76	0.65	0.67	12.99	8.46	9.29
SCE-15-SW-003A	-	-	-	-	-	-	-	-	-
SCE-15-SW-003B	0.74	0.63	0.67	0.75	0.63	0.67	12.88	5.48	8.01
SCE-15-SW-003C	0.79	0.66	0.68	0.77	0.66	0.68	13.36	13.71	12.65
SCE-15-SW-003D	-	-	-	-	-	-	-	-	-
SCE-15-SW-004	0.74	0.65	0.67	0.74	0.63	0.67	9.08	7.39	8.07
SCE-15-SW-004A	0.74	0.63	0.66	0.74	0.63	0.66	7.20	7.20	7.20
SCE-15-SW-004B	0.74	0.67	0.68	0.74	0.63	0.68	10.79	5.86	8.01
SCE-15-SW-004C	0.83	0.64	0.71	0.82	0.64	0.72	5.02	12.34	12.97
SCE-15-SW-004D	-	-	-	-	-	-	-	-	-
SCE-15-SW-005	0.60	0.63	0.62	0.60	0.66	0.64	7.44	8.30	7.65
SCE-15-SW-005A	-	-	-	-	-	-	-	-	-
SCE-15-SW-005B	0.89	0.64	0.80	0.89	0.65	0.80	6.05	11.05	6.50
SCE-15-SW-005C	0.59	0.63	0.59	0.60	0.66	0.59	7.44	7.05	7.85
SCE-15-SW-006	-	-	-	-	-	-	-	-	-
SCE-15-SW-007	-	-	-	-	-	-	-	-	-
SCE-15-SW-007A	-	-	-	-	-	-	-	-	-
SCE-15-SW-007B	-	-	-	-	-	-	-	-	-
SCE-15-SW-007C	-	-	-	-	-	-	-	-	-
SCE-15-SW-008	-	-	-	-	-	-	-	-	-
SCE-15-SW-008A	-	-	-	-	-	-	-	-	-
SCE-15-SW-008B	-	-	-	-	-	-	-	-	-
SCE-15-SW-008C	-	-	-	-	-	-	-	-	-
SCE-15-SW-008D	-	-	-	-	-	-	-	-	-
SCE-15-SW-008E	-	-	-	-	-	-	-	-	-
SCE-15-SW-009	-	-	-	-	-	-	-	-	-
SCE-15-SW-009A	-	-	-	-	-	-	-	-	-
SCE-15-SW-009B	-	-	-	-	-	-	-	-	-
SCE-15-SW-009C	-	-	-	-	-	-	-	-	-
SCE-15-SW-010	0.57	0.55	0.58	0.57	0.55	0.58	8.04	15.07	12.96
SCE-15-SW-010A	-	-	-	-	-	-	-	-	-
SCE-15-SW-010B	0.57	0.55	0.58	0.57	0.55	0.58	8.04	15.07	12.96
SCE-15-SW-010C	-	-	-	-	-	-	-	-	-
SCE-15-L-001	-	-	-	-	-	-	-	-	-
SCE-15-L-002	0.72	0.64	0.62	0.71	0.60	0.63	12.92	8.38	10.85
SCE-15-L-002Rollup	-	0.61	0.64	-	0.60	0.70	-	8.86	12.37
SCE-15-L-002A	0.93	0.62	0.25	0.93	0.59	0.32	12.92	6.17	12.42
SCE-15-L-002B	0.70	0.70	0.69	0.73	0.63	0.65	12.56	6.24	7.67
SCE-15-L-002C	0.74	0.63	0.27	0.76	0.60	0.44	11.02	5.93	14.76
SCE-15-L-002D	0.89	0.64	0.73	0.89	0.62	0.71	11.99	7.03	13.36
SCE-15-L-002E	0.65	0.59	0.80	0.64	0.59	0.88	8.90	7.54	13.34
SCE-15-L-002F	0.84	0.66	0.77	0.84	0.60	0.92	11.68	6.68	14.02
SCE-15-L-002G	0.69	0.61	0.65	0.69	0.60	0.70	12.81	7.13	11.32
SCE-15-L-002H	0.85	0.57	0.28	0.85	0.61	0.44	3.40	9.42	12.58
SCE-15-L-002I	-	-	-	-	-	-	-	-	-
SCE-15-L-002J	0.72	0.61	0.56	0.73	0.60	0.58	12.76	9.88	11.62
SCE-15-L-002K	0.67	0.67	0.63	0.67	0.62	0.69	14.80	11.56	9.24
SCE-15-L-002L	0.77	0.78	0.69	0.73	0.60	0.73	12.75	10.04	9.49
SCE-15-L-002M	0.67	0.56	0.57	0.67	0.67	0.59	11.09	9.46	9.67
SCE-15-L-002N	0.68	0.61	0.19	0.68	0.60	0.32	13.15	11.33	13.90
SCE-15-L-002O	0.74	0.67	0.73	0.75	0.62	0.65	12.46	6.80	3.88
SCE-15-L-002P	0.83	0.60	0.72	0.87	0.60	0.92	12.60	11.77	11.76
SCE-15-L-002Q	0.71	0.60	0.52	0.71	0.59	0.54	12.66	7.58	10.98
SCE-15-L-002R	0.78	0.65	0.64	0.79	0.62	0.63	11.09	5.29	8.67
SCE-15-L-002S	0.67	0.61	0.66	0.67	0.60	0.23	15.00	6.48	10.90
SCE-15-L-002T	0.64	0.59	0.63	0.63	0.60	0.63	9.22	9.46	5.02
SCE-15-L-002U	-	-	-	-	-	-	-	-	-
SCE-15-L-003	0.73	0.65	0.68	0.75	0.61	0.65	12.32	7.14	10.50
SCE-15-L-003A	0.73	0.64	0.70	0.79	0.60	0.65	12.84	8.83	9.97
SCE-15-L-003B	0.73	0.66	0.71	0.73	0.63	0.70	16.00	5.67	10.98
SCE-15-L-003C	0.83	0.66	0.68	0.77	0.62	0.69	11.62	7.47	10.58
SCE-15-L-003D	0.70	0.67	0.71	0.71	0.63	0.67	13.13	5.01	8.60
SCE-15-L-003E	0.64	0.66	0.62	0.65	0.61	0.62	14.40	5.02	11.99
SCE-15-L-003F	0.75	0.67	0.69	0.75	0.64	0.69	14.47	4.97	11.11
SCE-15-L-003G	0.70	0.63	0.67	0.72	0.61	0.64	11.99	7.68	10.25
SCE-15-L-003H	4.18	-	0.66	4.21	-	0.63	82.46	-	11.36
SCE-15-TP-001	0.89	0.85	0.89	0.89	0.85	0.89	6.72	13.97	9.73
SCE-15-TP-002	-	-	-	-	-	-	-	-	-
SCE-15-TP-003	0.72	0.71	0.65	0.72	0.67	0.68	13.97	5.62	5.28
SCE-15-TP-004	0.61	0.60	0.67	0.61	0.59	0.67	16.50	4.26	4.69
SCE-15-TP-005	0.78	0.70	0.68	0.79	0.66	0.68	12.68	4.69	5.46
SCE-15-TP-006	0.64	0.65	0.66	0.64	0.65	0.66	14.68	5.97	5.87
SCE-15-TP-007	0.68	0.69	0.66	0.68	0.69	0.66	12.45	6.31	5.42
SCE-15-TP-008	0.75	0.60	0.63	0.77	0.60	0.63	12.16	5.20	11.96
SCE-15-TP-009	0.64	0.60	0.63	0.64	0.61	0.63	14.69	4.92	11.66
SCE-15-TP-010	0.67	0.61	0.64	0.69	0.61	0.64	12.77	4.85	10.96
SCE-15-TP-011	0.64	0.60	0.63	0.64	0.60	0.63	13.83	4.55	14.83
SCE-15-TP-012	0.78	0.60	-	0.76	0.60	-	10.58	6.25	-
SCE-15-TP-013	0.78	0.70	0.86	0.75	0.70	0.86	11.91	5.00	10.00
SCE-15-TP-014	0.65	0.65	0.75	0.66	0.65	0.84	14.81	15.22	10.78
SCE-15-TP-017	0.89	0.86	-	0.89	0.85	-	14.29	8.97	-
SCE-15-TP-018	0.89	0.89	0.93	0.89	0.87	0.92	14.29	6.66	5.87
SCE-15-TP-019	-	-	-	-	-	-	-	-	-
SCE-15-TP-020	-	0.85	0.89	-	0.85	0.89	-	6.72	6.72
SCE-15-TP-021	-	0.85	0.89	-	0.85	0.89	-	8.00	8.00
Monitoring-Based Commissioning	0.68			0.69			8.00		
Monitoring-Based Persistence Commissioning Program	0.74			0.67			8.16		
LIEE	-	-	-	-	-	-	-	-	-
Total SCE Portfolio - Gross Savings [1]	-	-	-	-	-	-	-	-	-
Codes & Standards Advocacy Net Savings [2]	-	-	-	-	-	-	-	-	-
CFL Carryover	-	-	-	-	-	-	-	-	-
Total SCE Portfolio									
SoCalREN	-	-	-	-	-	-	-	-	-
Total SCE EE Portfolio [5,6,7, & 8 for TRC and PAC]	-	-	-	-	-	-	-	-	-

Program Information

New Program #	Program Type	Market Sector	Pilot Program	Program Status	Utility Grouping
SCE-15-SW-001	Core - SW/3P	Residential		Existing/New/Re	Residential Programs
SCE-15-SW-001A	Core - SW/3P	Residential		Revised	Energy Advisor
SCE-15-SW-001B	Core - SW/3P	Residential		New	PLA
SCE-15-SW-001C	Core - SW	Residential		Existing	MFEER
SCE-15-SW-001D	Core - SW/3P	Residential		New	Whole House
SCE-15-SW-001E	Core - SW/3P	Residential		Existing	HVAC
SCE-15-SW-001F	Core - SW	Residential		Existing	New Construction
SCE-15-SW-002	Core - SW/3P	Commercial		Existing	Commercial Programs
SCE-15-SW-002A	Core - SW/3P	Commercial		Existing	Energy Advisor
SCE-15-SW-002B	Core - SW/3P	Commercial		Existing	Calculated Incentives
SCE-15-SW-002C	Core - SW	Commercial		Existing	Deemed Incentives
SCE-15-SW-002D	Core - SW/3P	Commercial		Existing	Direct Install
SCE-15-SW-002E	Core - SW/3P	Commercial		Existing	CEI
SCE-15-SW-002F	Core - SW/3P	Commercial		Existing	HVAC
SCE-15-SW-002G	Core - SW/3P	Commercial		Existing	New Construction
SCE-15-SW-003	Core - SW/3P	Industrial		Existing	Industrial Programs
SCE-15-SW-003A	Core - SW/3P	Industrial		Existing	Energy Advisor
SCE-15-SW-003B	Core - SW/3P	Industrial		Existing	Calculated Incentives
SCE-15-SW-003C	Core - SW	Industrial		Existing	Deemed Incentives
SCE-15-SW-003D	Core - SW/3P	Industrial		Existing	CEI
SCE-15-SW-004	Core - SW/3P	Agricultural		Existing	Agricultural Programs
SCE-15-SW-004A	Core - SW/3P	Agricultural		Existing	Energy Advisor
SCE-15-SW-004B	Core - SW/3P	Agricultural		Existing	Calculated Incentives
SCE-15-SW-004C	Core - SW	Agricultural		Existing	Deemed Incentives
SCE-15-SW-004D	Core - SW/3P	Agricultural		Existing	CEI
SCE-15-SW-005	Core -SW/3P	Cross Cutting		Existing	Lighting Programs
SCE-15-SW-005A	Core - SW	Cross Cutting		Existing	Lighting Programs
SCE-15-SW-005B	Core - SW/3P	Cross Cutting		New	Lighting Programs
SCE-15-SW-005C	Core - SW/3P	Cross Cutting		Existing	Lighting Programs
SCE-15-SW-006	Core - SW	Cross Cutting		Existing	DSM Integration Programs
SCE-15-SW-007	Core - SW	Cross Cutting		Existing	Financing Programs
SCE-15-SW-007A	Core - SW	Cross Cutting		Existing	Financing Programs
SCE-15-SW-007B	Core - SW	Cross Cutting		New	Financing Programs
SCE-15-SW-007C	Core - SW	Cross Cutting		Existing	Financing Programs
SCE-15-SW-008	Core - SW	Cross Cutting		Existing	Codes and Standars
SCE-15-SW-008A	Core - SW	Cross Cutting		Existing	Codes and Standars
SCE-15-SW-008B	Core - SW	Cross Cutting		Existing	Codes and Standars
SCE-15-SW-008C	Core - SW	Cross Cutting		Existing	Codes and Standars
SCE-15-SW-008D	Core - SW	Cross Cutting		Existing	Codes and Standars
SCE-15-SW-008E	Core - SW	Cross Cutting		Existing	Codes and Standars
SCE-15-SW-009	Core - SW/3P	Cross Cutting		Revised	Emerging Technology Programs
SCE-15-SW-009A	Corw - SW	Cross Cutting		Revised	Emerging Technology Programs
SCE-15-SW-009B	Core - SW	Cross Cutting		Revised	Emerging Technology Programs
SCE-15-SW-009C	Core - SW/3P	Cross Cutting		Revised	Emerging Technology Programs
SCE-15-SW-010	Core - SW/3P	Cross Cutting		Revised	WE&T Programs
SCE-15-SW-010A	Core - SW	Cross Cutting		Existing	WE&T Programs
SCE-15-SW-010B	Core- SW/3P	Cross Cutting		Existing	WE&T Programs
SCE-15-SW-010C	Core - SW	Cross Cutting		Existing	WE&T Programs
SCE-15-L-001	3P	Industrial	lot Progra	Existing	Industrial 3P Programs
SCE-15-L-002	Govt Partnerships	Govt Partnerships		Existing	Government Partnerships
SCE-15-L-002Rollup	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-002A	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-002B	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-002C	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-002D	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-002E	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-002F	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-002G	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-002H	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-002I	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-002J	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-002K	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-002L	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-002M	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-002N	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-002O	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-002P	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-002Q	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-002R	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-002S	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-002T	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-002U	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-003	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-003A	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-003B	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-003C	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-003D	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-003E	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-003F	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-003G	Govt Partnerships	Cross Cutting		Existing	Government Partnerships
SCE-15-L-003H	Govt Partnerships	Cross Cutting		New	Government Partnerships
SCE-15-TP-001	3P	Residential		Existing	Residential 3P Programs
SCE-15-TP-002	3P	Commercial		Existing	Commercial 3P Programs
SCE-15-TP-003	3P	Commercial		Existing	Commercial 3P Programs
SCE-15-TP-004	3P	Commercial		Existing	Commercial 3P Programs
SCE-15-TP-005	3P	Commercial		Existing	Commercial 3P Programs
SCE-15-TP-006	3P	Industrial		Existing	Industrial 3P Programs
SCE-15-TP-007	3P	Industrial		Existing	Industrial 3P Programs
SCE-15-TP-008	3P	Industrial		Existing	Industrial 3P Programs
SCE-15-TP-009	3P	Industrial		Existing	Industrial 3P Programs
SCE-15-TP-010	3P	Industrial		Existing	Industrial 3P Programs
SCE-15-TP-011	3P	Industrial		Existing	Industrial 3P Programs
SCE-15-TP-012	3P	Industrial		Existing	Industrial 3P Programs
SCE-15-TP-013	3P	Commercial		Existing	Commercial 3P Programs
SCE-15-TP-014	3P	Commercial		Existing	Commercial 3P Programs
SCE-15-TP-017	3P	Commercial		Existing	Commercial 3P Programs
SCE-15-TP-018	3P	Commercial		Existing	Commercial 3P Programs
SCE-15-TP-019	3P	Cross Cutting		Existing	New Construction
SCE-15-TP-020	3P	Cross Cutting		New	Commercial/Industrial/Agricultural 3P
SCE-15-TP-021	3P	Commercial		New	Commercial 3P Programs
Codes & Standards Advocacy Net Savings [2]	C&S	Cross Cutting		Existing	C&S
SoCalREN	REN/CCA	Cross Cutting		Existing	REN

1. Program Savings exclude Codes and Standards, CFL carryover savings and includes ESAP projected savings
2. Codes and Standards reflect net savings
3. TRC/PAC values are based on sub-program E3 calculators, which for 2015 includes previously committed projects expected to be completed during 2015
4. All savings values include 5% market spillover in cost-effectiveness calculations excluding Codes and Standards per OP #37 in D.12-11-015
5. Includes Codes and Standards costs and benefits; excludes ESAP costs and benefits, Statewide Emerging Technology costs and $11.1M in Financing Program costs per D.09-09-047 and D.13-09-044
6. Includes projected shareholder incentives estimate of 6.8% of the total budget or $23M based on methodology outlined in D.13-09-023
7. Includes benefits burdens, Statewide ME&O budget as approved in A.12-08-007, and 2015-14 REN/CCA EE program costs only, but not savings and benefits

Appendix B.3 – Budget, spent, unspent and Carryover Details

New/Existing Program #	Main Program Name / Sub-Program Name	Total Budget, Spent and Unspent				Total 2013 Authorized minus Spent from 2013 Authorized (column H) by Category (2)				Detail for pre-2010 may be shown by fund shifting category or sector/area if a matching or similar current program does not exist.					
		2013-14 Authorized Program Budget Annualized	2013 Actual Spent (1)	pre 2013-2014 Carryover spent in 2013	2013-14 Authorized Program Budget Annualized not Spent (E minus F plus G)	2013 Unspent but accrued for 2013	2013 Committed and/or encumbered funds (3)	2013 Unspent - planned for use in 2014	2013 Unspent - available for 2015 (4)	pre 2013 CARRYOVER to 2014 and beyond	2013 CARRYOVER to 2014 and beyond	TOTAL CARRYOVER	Program Type	Market Sector	Program Status
SCE-15-SW-001	**California Statewide Program for Residential Energy Efficienc**	**$ 90,900,000**	**$ 30,304,408**	**$ 4,567,532**	**$ 60,595,592**	**$ -**	**$ 1,079,317**	**$ 12,267,258**	**$ -**	**$ 4,400,000**	**$ -**	**$ 4,400,000**	**Core - SW/3P**	**Residential**	**sting/New/Revi**
SCE-15-SW-001A	Energy Advisor Program	$ 6,819,399	$ 3,488,175	$ (181,670)	$ 3,331,224	$ -	$ -	$ 650,314	$ -	$ -	$ -	$ -	Core - SW/3P	Residential	Revised
SCE-15-SW-001B	Plug Load and Appliances Program	$ 28,591,225	$ 11,501,794	$ 549,150	$ 17,089,431	$ -	$ -	$ 2,759,731	$ -	$ -	$ -	$ -	Core - SW/3P	Residential	New
SCE-15-SW-001C	Multifamily Energy Efficiency Rebate Program	$ 23,495,962	$ 3,909,263	$ 978,692	$ 19,586,699	$ -	$ -	$ 7,213,149	$ -	$ -	$ -	$ -	Core - SW	Residential	Existing
SCE-15-SW-001D	Energy Upgrade California	$ 17,010,781	$ 5,368,187	$ 80,213	$ 11,642,594	$ -	$ -	$ 3,008,537	$ -	$ -	$ -	$ -	Core - SW/3P	Residential	New
SCE-15-SW-001E	Residential HVAC Program	$ 7,465,177	$ 3,481,264	$ 702,346	$ 3,983,913	$ -	$ -	$ (1,216,107)	$ -	$ -	$ -	$ -	Core - SW/3P	Residential	Existing
SCE-15-SW-001F	Residential New Construction Program	$ 7,517,456	$ 2,555,725	$ 2,438,801	$ 4,961,731	$ -	$ 1,079,317	$ (148,366)	$ -	$ 4,400,000	$ -	$ 4,400,000	Core - SW	Residential	Existing
SCE-15-SW-002	**Statewide Commercial Energy Efficiency Program**	**$ 171,400,000**	**$ 91,014,983**	**$ 20,728,205**	**$ 80,385,017**	**$ -**	**$ 29,804,344**	**$ (31,768,923)**	**$ -**	**$ 7,900,809**	**$ -**	**$ 7,900,809**	**Core - SW/3P**	**Commercial**	**Existing**
SCE-15-SW-002A	Commercial Energy Advisor Program	$ 7,064,954	$ 1,978,382	$ (10,132)	$ 5,086,572	$ -	$ -	$ 1,827,286	$ -	$ -	$ -	$ -	Core - SW/3P	Commercial	Existing
SCE-15-SW-002B	Commercial Calculated Program	$ 16,087,060	$ 5,830,992	$ 5,299,955	$ 10,256,068	$ -	$ 7,190,810	$ (5,347,265)	$ -	$ 723,782	$ -	$ 723,782	Core - SW/3P	Commercial	Existing
SCE-15-SW-002C	Commercial Deemed Incentives Program	$ 34,560,333	$ 9,126,622	$ 3,910,867	$ 25,433,711	$ -	$ 5,295,708	$ 4,745,897	$ -	$ 227,422	$ -	$ 227,422	Core - SW	Commercial	Existing
SCE-15-SW-002D	Commercial Direct Install Program	$ 35,075,424	$ 42,092,665	$ 4,396,987	$ (7,017,241)	$ -	$ 12,434,592	$ (38,851,217)	$ -	$ 521,823	$ -	$ 521,823	Core - SW/3P	Commercial	Existing
SCE-15-SW-002E	Commercial Continuous Energy Improvement Program	$ 2,609,300	$ 696,142	$ 105,228	$ 1,913,158	$ -	$ -	$ 793,549	$ -	$ -	$ -	$ -	Core - SW/3P	Commercial	Existing
SCE-15-SW-002F	Nonresidential HVAC Program	$ 58,179,634	$ 27,369,488	$ 1,591,419	$ 30,810,146	$ -	$ -	$ 5,396,582	$ -	$ -	$ -	$ -	Core - SW/3P	Commercial	Existing
SCE-15-SW-002G	Savings By Design	$ 17,823,294	$ 3,920,691	$ 5,433,882	$ 13,902,603	$ -	$ 4,883,234	$ (333,753)	$ -	$ 6,427,783	$ -	$ 6,427,783	Core - SW/3P	Commercial	Existing
SCE-15-SW-003	**Statewide Industrial Energy Efficiency Program**	**$ 32,799,999**	**$ 3,952,288**	**$ 2,183,283**	**$ 28,847,711**	**$ -**	**$ 2,074,773**	**$ 11,099,554**	**$ -**	**$ 1,598,466**	**$ -**	**$ 1,598,466**	**Core - SW/3P**	**Industrial**	**Existing**
SCE-15-SW-003A	Industrial Energy Advisor Program	$ 3,671,003	$ 595,200	$ 36,319	$ 3,075,803	$ -	$ -	$ 1,435,649	$ -	$ -	$ -	$ -	Core - SW/3P	Industrial	Existing
SCE-15-SW-003B	Industrial Calculated Energy Efficiency Program	$ 18,173,825	$ 1,865,779	$ 1,714,802	$ 16,308,046	$ -	$ 1,866,179	$ 5,191,459	$ -	$ 1,594,866	$ -	$ 1,594,866	Core - SW/3P	Industrial	Existing
SCE-15-SW-003C	Industrial Deemed Energy Efficiency Program	$ 9,416,634	$ 1,341,459	$ 421,199	$ 8,075,175	$ -	$ 208,593	$ 3,961,936	$ -	$ 3,600	$ -	$ 3,600	Core - SW	Industrial	Existing
SCE-15-SW-003D	Industrial Continuous Energy Improvement Program	$ 1,538,537	$ 149,850	$ 10,963	$ 1,388,687	$ -	$ -	$ 510,511	$ -	$ -	$ -	$ -	Core - SW/3P	Industrial	Existing
SCE-15-SW-004	**Statewide Agriculture Energy Efficiency Program**	**$ 10,460,001**	**$ 3,390,749**	**$ 2,219,227**	**$ 7,069,252**	**$ -**	**$ 3,371,450**	**$ (1,731,092)**	**$ -**	**$ 672,547**	**$ -**	**$ 672,547**	**Core - SW/3P**	**Agricultural**	**Existing**
SCE-15-SW-004A	Agriculture Energy Advisor Program	$ 5,921,087	$ 1,661,709	$ 832,522	$ 4,259,378	$ -	$ -	$ 1,322,139	$ -	$ -	$ -	$ -	Core - SW/3P	Agricultural	Existing
SCE-15-SW-004B	Agriculture Calculated Energy Efficiency Program	$ 3,231,235	$ 1,502,689	$ 1,337,105	$ 1,728,546	$ -	$ 3,342,730	$ (3,299,857)	$ -	$ 672,547	$ -	$ 672,547	Core - SW/3P	Agricultural	Existing
SCE-15-SW-004C	Agriculture Deemed Energy Efficiency Program	$ 936,322	$ 206,154	$ 49,184	$ 730,168	$ -	$ 28,720	$ 231,735	$ -	$ -	$ -	$ -	Core - SW	Agricultural	Existing
SCE-15-SW-004D	Agriculture Continuous Energy Improvement Program	$ 371,357	$ 20,197	$ 416	$ 351,160	$ -	$ -	$ 14,890	$ -	$ -	$ -	$ -	Core - SW/3P	Agricultural	Existing
SCE-15-SW-005	**Lighting Program**	**$ 37,061,079**	**$ 13,250,683**	**$ 754,072**	**$ 23,810,396**	**$ -**	**$ -**	**$ 2,846,325**	**$ -**	**$ -**	**$ -**	**$ -**	**Core -SW/3P**	**Cross Cutting**	**Existing**
SCE-15-SW-005A	Lighting Market Transformation Program	$ 670,228	$ 148,600	$ 19,956	$ 521,628	$ -	$ -	$ 208,506	$ -	$ -	$ -	$ -	Core - SW	Cross Cutting	Existing
SCE-15-SW-005B	Lighting Innovation Program	$ 12,666,815	$ 488,788	$ -	$ 12,178,026	$ -	$ -	$ 4,876,224	$ -	$ -	$ -	$ -	Core - SW/3P	Cross Cutting	New
SCE-15-SW-005C	Primary Lighting Program	$ 23,724,036	$ 12,613,294	$ 734,116	$ 11,110,742	$ -	$ -	$ (2,238,404)	$ -	$ -	$ -	$ -	Core - SW/3P	Cross Cutting	Existing
SCE-15-SW-006	**Integrated Demand Side Management Program**	**$ 1,355,000**	**$ 261,490**	**$ 30,346**	**$ 1,093,510**	**$ -**	**$ -**	**$ 415,837**	**$ -**	**$ -**	**$ -**	**$ -**	**Core - SW**	**Cross Cutting**	**Existing**
SCE-15-SW-007	**Statewide Finance Program**	**$ 81,225,000**	**$ 3,010,745**	**$ 1,770,349**	**$ 78,214,256**	**$ -**	**$ 32,875,000**	**$ 4,821,493**	**$ -**	**$ -**	**$ -**	**$ -**	**Core - SW**	**Cross Cutting**	**Existing**
SCE-15-SW-007A	On-Bill Financing	$ 54,325,000	$ 2,168,918	$ 1,770,349	$ 52,156,082	$ -	$ 22,900,000	$ 3,654,152	$ -	$ -	$ -	$ -	Core - SW	Cross Cutting	Existing
SCE-15-SW-007B	ARRA-Originated Financing	$ 5,000,000	$ 467,651	$ -	$ 4,532,349	$ -	$ 1,975,000	$ 129,042	$ -	$ -	$ -	$ -	Core - SW	Cross Cutting	New
SCE-15-SW-007C	New Finance Offerings	$ 21,900,000	$ 374,176	$ -	$ 21,525,824	$ -	$ 8,000,000	$ 1,038,299	$ -	$ -	$ -	$ -	Core - SW	Cross Cutting	Existing
SCE-15-SW-008	**Codes and Standards Program**	**$ 11,761,478**	**$ 3,273,462**	**$ 297,364**	**$ 8,488,016**	**$ -**	**$ -**	**$ 2,619,858**	**$ -**	**$ 1,000,000**	**$ -**	**$ -**	**Core - SW**	**Cross Cutting**	**Existing**
SCE-15-SW-008A	Building Codes and Compliance Advocacy	$ 3,421,521	$ 623,337	$ 79,783	$ 2,798,183	$ -	$ -	$ 1,091,088	$ -	$ -	$ -	$ -	Core - SW	Cross Cutting	Existing
SCE-15-SW-008B	Appliance Standards Advocacy	$ 3,421,521	$ 1,195,040	$ 84,120	$ 2,226,481	$ -	$ -	$ 519,385	$ -	$ -	$ -	$ -	Core - SW	Cross Cutting	Existing
SCE-15-SW-008C	Compliance Improvement	$ 1,603,839	$ 1,106,175	$ 132,953	$ 497,664	$ -	$ -	$ (302,538)	$ -	$ -	$ -	$ -	Core - SW	Cross Cutting	Existing
SCE-15-SW-008D	Reach Codes	$ 1,069,224	$ 120,128	$ 508	$ 949,096	$ -	$ -	$ 415,630	$ -	$ -	$ -	$ -	Core - SW	Cross Cutting	Existing
SCE-15-SW-008E	Planning and Coordination	$ 2,245,373	$ 228,781	$ -	$ 2,016,591	$ -	$ -	$ 896,294	$ -	$ -	$ -	$ -	Core - SW	Cross Cutting	Existing
SCE-15-SW-009	**Emerging Technologies Program**	**$ 21,185,430**	**$ 3,429,837**	**$ 2,228,451**	**$ 17,755,594**	**$ -**	**$ 88,717**	**$ 7,096,844**	**$ -**	**$ -**	**$ -**	**$ -**	**Core - SW/3P**	**Cross Cutting**	**Revised**
SCE-15-SW-009A	Technology Development Support	$ 3,684,510	$ 1,515,837	$ 760,090	$ 2,168,673	$ -	$ 88,717	$ 241,695	$ -	$ -	$ -	$ -	Corw - SW	Cross Cutting	Revised
SCE-15-SW-009B	Technology Assessments	$ 8,284,797	$ 1,028,955	$ 718,408	$ 7,255,842	$ -	$ -	$ 3,122,252	$ -	$ -	$ -	$ -	Core - SW	Cross Cutting	Revised
SCE-15-SW-009C	Technology Introduction Support	$ 9,216,123	$ 885,045	$ 749,953	$ 8,331,079	$ -	$ -	$ 3,732,897	$ -	$ -	$ -	$ -	Core - SW/3P	Cross Cutting	Revised
SCE-15-SW-010	**Workforce Education & Training**	**$ 17,990,000**	**$ 7,754,363**	**$ 765,731**	**$ 10,235,637**	**$ -**	**$ -**	**$ 1,238,636**	**$ -**	**$ -**	**$ -**	**$ -**	**Core - SW/3P**	**Cross Cutting**	**Existing**
SCE-15-SW-010A	WE&T Centergies	$ 11,100,000	$ 4,836,911	$ 444,427	$ 6,263,089	$ -	$ -	$ 731,496	$ -	$ -	$ -	$ -	Core - SW	Cross Cutting	Existing
SCE-15-SW-010B	WE&T Connections	$ 6,700,000	$ 2,889,227	$ 316,257	$ 3,810,773	$ -	$ -	$ 468,181	$ -	$ -	$ -	$ -	Core- SW/3P	Cross Cutting	Existing
SCE-15-SW-010C	WE&T Planning	$ 190,000	$ 28,226	$ 5,047	$ 161,775	$ -	$ -	$ 38,958	$ -	$ -	$ -	$ -	Core - SW	Cross Cutting	Existing
SCE-15-L-001	**Integrated Demand Side Management Pilot for Food Processi**	**$ 355,000**	**$ 211,236**	**$ 5,663**	**$ 143,764**	**$ -**	**$ -**	**$ (42,169)**	**$ -**	**$ -**	**$ -**	**$ -**	**3P**	**Industrial**	**Existing**
SCE-15-L-002	**Energy Leader Partnership Program**	**$ 29,059,191**	**$ 6,927,428**	**$ 4,668,436**	**$ 22,131,763**	**$ -**	**$ 1,257,253**	**$ 5,090,222**	**$ -**	**$ 1,377,595**	**$ -**	**$ 1,377,595**	**Govt Partnerships**	**Govt Partnerships**	**Existing**
SCE-15-L-002Roll	Energy Leader Partnership Program	$ 1,246,707	$ 38,393	$ 32,538	$ 1,208,315	$ -	$ -	$ 399,612	$ -	$ -	$ -	$ -	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-002A	City of Beaumont Energy Leader Partnership	$ 188,982	$ 72,460	$ 8,646	$ 116,522	$ -	$ -	$ 11,038	$ -	$ -	$ -	$ -	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-002B	City of Long Beach Energy Leader Partnership	$ 544,043	$ 81,762	$ 177,808	$ 462,281	$ -	$ 29,850	$ 103,269	$ -	$ 55,852	$ -	$ 55,852	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-002C	City of Redlands Energy Leader Partnership	$ 547,819	$ 171,546	$ 50,527	$ 376,273	$ -	$ 323,895	$ (284,451)	$ -	$ -	$ -	$ -	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-002D	City of Santa Ana Energy Leader Partnership	$ 632,199	$ 173,094	$ 5,716	$ 459,105	$ -	$ 63,453	$ 22,569	$ -	$ -	$ -	$ -	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-002E	City of Simi Valley Energy Leader Partnership	$ 163,970	$ 61,338	$ 1,697	$ 102,633	$ -	$ 9,119	$ 7,440	$ -	$ -	$ -	$ -	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-002F	Gateway Cities Energy Leader Partnership	$ 1,145,487	$ 252,589	$ -	$ 892,898	$ -	$ 16,889	$ 290,561	$ -	$ -	$ -	$ -	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-002G	Community Energy Leader Partnership	$ 3,187,506	$ 970,521	$ 364,017	$ 2,216,985	$ -	$ 138,842	$ 482,853	$ -	$ 355,431	$ -	$ 355,431	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-002H	Eastern Sierra Energy Leader Partnership	$ 335,038	$ 114,925	$ 9,192	$ 220,113	$ -	$ -	$ 51,407	$ -	$ -	$ -	$ -	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-002I	Energy Leader Partnership Strategic Support	$ 957,085	$ 467,021	$ 263	$ 490,064	$ -	$ -	$ 11,686	$ -	$ -	$ -	$ -	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-002J	Desert Cities Energy Leader Partnership	$ 878,747	$ 238,453	$ 534,970	$ 640,295	$ -	$ 48,298	$ 136,357	$ -	$ -	$ -	$ -	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-002K	Kern County Energy Leader Partnership	$ 468,659	$ 169,940	$ 29,456	$ 298,718	$ -	$ -	$ 73,183	$ -	$ -	$ -	$ -	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-002L	Orange County Cities Energy Leader Partnership	$ 2,195,768	$ 280,174	$ -	$ 1,915,594	$ -	$ 38,578	$ 598,862	$ -	$ 90,262	$ -	$ 90,262	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-002M	San Gabriel Valley Energy Leader Partnership	$ 1,188,936	$ 510,050	$ 148,914	$ 678,886	$ -	$ 134,390	$ (50,227)	$ -	$ 154,639	$ -	$ 154,639	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-002N	San Joaquin Valley Energy Leader Partnership	$ 2,234,312	$ 379,771	$ 151,528	$ 1,854,541	$ -	$ 63,334	$ 590,885	$ -	$ 557,586	$ -	$ 557,586	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-002O	South Bay Energy Leader Partnership	$ 1,901,476	$ 567,990	$ 54,684	$ 1,333,486	$ -	$ 83,029	$ 253,503	$ -	$ 59,444	$ -	$ 59,444	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-002P	South Santa Barbara County Energy Leader Partnership	$ 810,580	$ 381,407	$ 6,337	$ 429,174	$ -	$ 51,241	$ (15,183)	$ -	$ 18,903	$ -	$ 18,903	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-002Q	Ventura County Energy Leader Partnership	$ 1,324,706	$ 423,079	$ 43,531	$ 901,627	$ -	$ 124,680	$ 68,258	$ -	$ 60,836	$ -	$ 60,836	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-002R	Western Riverside Energy Leader Partnership	$ 863,163	$ 285,808	$ 17,565	$ 577,355	$ -	$ 105,097	$ 14,360	$ -	$ 24,641	$ -	$ 24,641	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-002S	City of Adelanto Energy Leader Partnership	$ 309,963	$ 72,385	$ 277,262	$ 237,578	$ -	$ 1,759	$ 136,385	$ -	$ -	$ -	$ -	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-002T	West Side Energy Leader Partnership	$ 405,647	$ 126,083	$ 18,443	$ 279,564	$ -	$ 24,800	$ 51,531	$ -	$ -	$ -	$ -	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-002U	Local Government Strategic Planning Pilot Program	$ 7,528,395	$ 1,088,640	$ 2,735,343	$ 6,439,754	$ -	$ -	$ 2,136,322	$ -	$ -	$ -	$ -	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-003	**Institutional and Government Core Energy Efficiency Partners**	**$ 21,180,810**	**$ 3,604,978**	**$ 5,080,139**	**$ 17,575,832**	**$ -**	**$ 6,324,439**	**$ (1,302,375)**	**$ -**	**$ 5,787,369**	**$ -**	**$ 5,787,369**	**Govt Partnerships**	**Cross Cutting**	**Existing**
SCE-15-L-003A	California Community Colleges Energy Efficiency Partnership	$ 5,891,083	$ 1,171,741	$ 1,539,785	$ 4,719,342	$ -	$ 2,726,893	$ (949,401)	$ -	$ 1,364,659	$ -	$ 1,364,659	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-003B	California Dept. of Corrections and Rehabilitation EE Partnership	$ 1,953,886	$ 161,152	$ 30,899	$ 1,792,733	$ -	$ 316,610	$ 722,218	$ -	$ 2,088,818	$ -	$ 2,088,818	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-003C	County of Los Angeles Energy Efficiency Partnership	$ 2,157,985	$ 318,287	$ 895,952	$ 1,839,698	$ -	$ 362,482	$ 394,716	$ -	$ 327,331	$ -	$ 327,331	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-003D	County of Riverside Energy Efficiency Partnership	$ 1,013,954	$ 121,667	$ 98,831	$ 892,287	$ -	$ 286,093	$ 35,598	$ -	$ 30,540	$ -	$ 30,540	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-003E	County of San Bernardino Energy Efficiency Partnership	$ 983,953	$ 327,722	$ 58,904	$ 656,231	$ -	$ 171,141	$ (51,527)	$ -	$ 281,326	$ -	$ 281,326	Govt Partnerships	Cross Cutting	Existing
SCE-15-L-003F	State of California Energy Efficiency Partnership	$ 1,865,179	$ 338,068	$ -	$ 1,527,111	$ -	$ 134,372	$ 331,227	$ -	$ 1,694,694	$ -	$ 1,694,694	Govt Partnerships	Cross Cutting	Existing

New/Existing Program #	Main Program Name / Sub-Program Name	2013-14 Authorized Program Budget Annualized	2013 Actual Spent (1)	pre 2013-2014 Carryover spent in 2013	2013-14 Authorized Program Budget Annualized not Spent (E minus F plus G)	2013 Unspent but accrued for 2013	2013 Committed and/or encumbered funds (3)	2013 Unspent - planned for use in 2014	2013 Unspent - available for 2015 (4)	pre 2013 CARRYOVER to 2014 and beyond	2013 CARRYOVER to 2014 and beyond	TOTAL CARRYOVER	Program Type	Market Sector	Program Status
SCE-15-L-003G	UC/CSU Energy Efficiency Partnership	$ 7,314,771	$ 1,166,340	$ 2,455,768	$ 6,148,430	$ -	$ 2,326,849	$ (1,785,206)	$ -	$ -	$ -	$ -	Govt Partnerships	Cross Cutting	Existing
SCE-15-TP-001	**Comprehensive Manufactured Homes**	**$ 5,151,387**	**$ 3,840,538**	**$ 676,430**	**$ 1,310,849**	**$ -**	**$ -**	**$ (1,265,878)**	**$ -**	$ -	$ -	$ -	3P	Residential	Existing
SCE-15-TP-002	**Cool Planet**	**$ 463,834**	**$ 195,342**	**$ 29,735**	**$ 268,492**	**$ -**	**$ -**	**$ 36,702**	**$ -**	$ -	$ -	$ -	3P	Commercial	Existing
SCE-15-TP-003	**Healthcare EE Program**	**$ 3,266,874**	**$ 979,887**	**$ 1,004,481**	**$ 2,286,987**	**$ -**	**$ 1,458,847**	**$ (804,449)**	**$ -**	$ 325,626	$ -	$ 325,626	3P	Commercial	Existing
SCE-15-TP-004	**Data Center Energy Efficiency**	**$ 4,893,386**	**$ 624,930**	**$ 1,026,016**	**$ 4,268,456**	**$ -**	**$ 400,505**	**$ 1,427,055**	**$ -**	$ 624,861	$ -	$ 624,861	3P	Commercial	Existing
SCE-15-TP-005	**Lodging EE Program**	**$ 4,418,711**	**$ 1,049,788**	**$ 1,492,791**	**$ 3,368,923**	**$ -**	**$ 2,187,685**	**$ (1,026,763)**	**$ -**	$ 1,094,885	$ -	$ 1,094,885	3P	Commercial	Existing
SCE-15-TP-006	**Food & Kindred Products**	**$ 9,087,996**	**$ 1,585,122**	**$ 1,187,346**	**$ 7,502,874**	**$ -**	**$ 1,393,620**	**$ 1,569,747**	**$ -**	$ 2,518,058	$ -	$ 2,518,058	3P	Industrial	Existing
SCE-15-TP-007	**Primary and Fabricated Metals**	**$ 8,304,875**	**$ 1,242,090**	**$ 722,135**	**$ 7,062,785**	**$ -**	**$ 1,080,599**	**$ 1,834,322**	**$ -**	$ 2,573,589	$ -	$ 2,573,589	3P	Industrial	Existing
SCE-15-TP-008	**Nonmetallic Minerals and Products**	**$ 7,484,773**	**$ 2,336,034**	**$ 1,306,599**	**$ 5,148,739**	**$ -**	**$ 4,786,386**	**$ (4,984,089)**	**$ -**	$ 4,329,965	$ -	$ 4,329,965	3P	Industrial	Existing
SCE-15-TP-009	**Comprehensive Chemical Products**	**$ 7,506,959**	**$ 1,023,797**	**$ 2,073,520**	**$ 6,483,162**	**$ -**	**$ 857,480**	**$ 1,877,696**	**$ -**	$ 3,481,368	$ -	$ 3,481,368	3P	Industrial	Existing
SCE-15-TP-010	**Comprehensive Petroleum Refining**	**$ 5,469,131**	**$ 825,842**	**$ 285,575**	**$ 4,643,289**	**$ -**	**$ 1,397,198**	**$ 512,912**	**$ -**	$ 2,230,444	$ -	$ 2,230,444	3P	Industrial	Existing
SCE-15-TP-011	**Oil Production**	**$ 6,804,471**	**$ 1,818,616**	**$ 3,972,929**	**$ 4,985,855**	**$ -**	**$ 3,341,413**	**$ (1,754,032)**	**$ -**	$ 2,133,255	$ -	$ 2,133,255	3P	Industrial	Existing
SCE-15-TP-012	**Refinery Energy Efficiency Program**	**$ 7,939,271**	**$ 607,033**	**$ 663,089**	**$ 7,332,237**	**$ -**	**$ 991,002**	**$ 2,380,530**	**$ -**	$ 861,112	$ -	$ 861,112	3P	Industrial	Existing
SCE-15-TP-013	**Cool Schools**	**$ 2,247,746**	**$ 590,338**	**$ 339,115**	**$ 1,657,408**	**$ -**	**$ 338,650**	**$ (44,016)**	**$ -**	$ -	$ -	$ -	3P	Commercial	Existing
SCE-15-TP-014	**Commercial Utility Building Efficiency**	**$ 4,752,344**	**$ 499,187**	**$ 473,567**	**$ 4,253,157**	**$ -**	**$ 910,733**	**$ 512,516**	**$ -**	$ 1,734,545	$ -	$ 1,734,545	3P	Commercial	Existing
SCE-15-TP-017	**Energy Efficiency for Entertainment Centers**	**$ 2,577,117**	**$ 151,809**	**$ 1,426**	**$ 2,425,308**	**$ -**	**$ -**	**$ 1,136,355**	**$ -**	$ 8,470	$ -	$ 8,470	3P	Commercial	Existing
SCE-15-TP-018	**School Energy Efficiency Program**	**$ 10,741,960**	**$ 592,175**	**$ 6,266,661**	**$ 10,149,786**	**$ -**	**$ -**	**$ 4,783,510**	**$ -**	$ -	$ -	$ -	3P	Commercial	Existing
SCE-15-TP-019	**Sustainable Communities**	**$ 2,204,237**	**$ 527,241**	**$ 117,880**	**$ 1,676,996**	**$ -**	**$ -**	**$ 574,623**	**$ -**	$ -	$ -	$ -	3P	Cross Cutting	Existing
SCE-15-TP-020	**IDEEA365 Program**	**$ 8,358,001**	**$ 224,557**	**$ -**	**$ 8,133,443**	**$ -**	**$ -**	**$ 4,013,680**	**$ -**	$ -	$ -	$ -	3P	Cross Cutting	New
SCE-15-TP-021	**Enhanced Retrocommissioning**	**$ 1,390,739**	**$ 4,049**	**$ 843,215**	**$ 1,386,691**	**$ -**	**$ 1,123,064**	**$ (431,128)**	**$ -**	$ -	$ -	$ -	3P	Commercial	New
	Retail Energy Action Program			**$ 188,942**			**$ -**	**$ -**		$ -	$ -	$ -			
	Outreach/Statewide ME&O (Pre 2013)			$ 1,166,039			$ -	$ -		$ -	$ -	$ -			
	Total SCE Program	**$ 629,796,799**	**$ 189,105,024**	**$ 69,136,291**	**$ 440,691,775**	**$ -**	**$ 97,142,474**	**$ 23,000,762**	**$ -**	**$ 44,652,964**	**$ -**	**$ 43,652,964**			
								$ -							
EM&V	**EM&V (SCE & CPUC Portions)**	**$ 28,664,374**	**$ 3,492,326**	**$ 11,699,300**	**$ 25,172,048**	**$ -**	**$ 10,936,509**	**$ -**	**$ -**	**$ 16,415,213**	**$ -**	**$ -**	**EM&V**	**Cross Cutting**	**Existing**
	EM&V - CPUC	$ 20,781,672	$ 142,107	$ 9,821,931	$ 20,639,565		$ 10,248,729	$ -		$ 14,403,780			EM&V	Cross Cutting	Existing
	EM&V - SCE	$ 7,882,702	$ 3,350,220	$ 1,877,369	$ 4,532,482		$ 687,780	$ -		$ 2,011,433			EM&V	Cross Cutting	Existing
	SCE Total with EM&V	**$ 658,461,173**	**$ 192,597,351**	**$ 80,835,592**	**$ 465,863,822**	**$ -**	**$ 108,078,983**	**$ 23,000,762**	**$ -**	**$ 61,068,177**	**$ -**	**$ 43,652,964**			
								$ -							
Other Program	**SoCalREN**	**$ 35,748,168**	**$ 157,677**	**$ -**	**$ 35,590,491**	$ -	$ 17,716,249	$ -	$ -	$ -	$ -	$ -	**REN/CCA**	**Cross Cutting**	**New**
								$ -							
	Total SCE Portfolio EM&V	**$ 694,209,340**	**$ 192,755,027**	**$ 80,835,592**	**$ 501,454,313**	**$ -**	**$ 125,795,232**	**$ 23,000,762**	**$ -**	**$ 61,068,177**	**$ -**	**$ 43,652,964**			

1. 2013 Actual Spent means funds expensed, including accruals, for program activities occurring from 1/1/13 through 12/31/13.
2. Total 2013 Authorized and Unspent means the 2013-14 authorized budget annualized minus funds expensesed from that budget for 2013.
3. 2013 Committed and/or encumbered funds means funds that are associated with individual customer projects and/or contained within contracts or purchase order for authorized activities after 12/31/2013
4. 2013 Unspent available for 2015 are total unspent uncommitted funds and not planned for use in 2014.
5. Detail for pre-2010 may be shown by fund shifting category or sector/area if a matching/similar current program does not exist.

Appendix B.3 – Budget, spent, unspent and Carryover Details

New/Existing Program #	Main Program Name / Sub-Program Name	Utility Grouping
SCE-15-SW-001	**California Statewide Program for Residential Energy Efficienc**	**Residential Programs**
SCE-15-SW-001A	Energy Advisor Program	Energy Advisor
SCE-15-SW-001B	Plug Load and Appliances Program	PLA
SCE-15-SW-001C	Multifamily Energy Efficiency Rebate Program	MFEER
SCE-15-SW-001D	Energy Upgrade California	Whole House
SCE-15-SW-001E	Residential HVAC Program	HVAC
SCE-15-SW-001F	Residential New Construction Program	New Construction
SCE-15-SW-002	**Statewide Commercial Energy Efficiency Program**	**Commercial Programs**
SCE-15-SW-002A	Commercial Energy Advisor Program	Energy Advisor
SCE-15-SW-002B	Commercial Calculated Program	Calculated Incentives
SCE-15-SW-002C	Commercial Deemed Incentives Program	Deemed Incentives
SCE-15-SW-002D	Commercial Direct Install Program	Direct Install
SCE-15-SW-002E	Commercial Continuous Energy Improvement Program	CEI
SCE-15-SW-002F	Nonresidential HVAC Program	HVAC
SCE-15-SW-002G	Savings By Design	New Construction
SCE-15-SW-003	**Statewide Industrial Energy Efficiency Program**	**Industrial Programs**
SCE-15-SW-003A	Industrial Energy Advisor Program	Energy Advisor
SCE-15-SW-003B	Industrial Calculated Energy Efficiency Program	Calculated Incentives
SCE-15-SW-003C	Industrial Deemed Energy Efficiency Program	Deemed Incentives
SCE-15-SW-003D	Industrial Continuous Energy Improvement Program	CEI
SCE-15-SW-004	**Statewide Agriculture Energy Efficiency Program**	**Agricultural Programs**
SCE-15-SW-004A	Agriculture Energy Advisor Program	Energy Advisor
SCE-15-SW-004B	Agriculture Calculated Energy Efficiency Program	Calculated Incentives
SCE-15-SW-004C	Agriculture Deemed Energy Efficiency Program	Deemed Incentives
SCE-15-SW-004D	Agriculture Continuous Energy Improvement Program	CEI
SCE-15-SW-005	**Lighting Program**	**Lighting Programs**
SCE-15-SW-005A	Lighting Market Transformation Program	Lighting Programs
SCE-15-SW-005B	Lighting Innovation Program	Lighting Programs
SCE-15-SW-005C	Primary Lighting Program	Lighting Programs
SCE-15-SW-006	**Integrated Demand Side Management Program**	**DSM Integration Programs**
SCE-15-SW-007	**Statewide Finance Program**	**Financing Programs**
SCE-15-SW-007A	On-Bill Financing	Financing Programs
SCE-15-SW-007B	ARRA-Originated Financing	Financing Programs
SCE-15-SW-007C	New Finance Offerings	Financing Programs
SCE-15-SW-008	**Codes and Standards Program**	**Codes and Standars**
SCE-15-SW-008A	Building Codes and Compliance Advocacy	Codes and Standars
SCE-15-SW-008B	Appliance Standards Advocacy	Codes and Standars
SCE-15-SW-008C	Compliance Improvement	Codes and Standars
SCE-15-SW-008D	Reach Codes	Codes and Standars
SCE-15-SW-008E	Planning and Coordination	Codes and Standars
SCE-15-SW-009	**Emerging Technologies Program**	Emerging Technology Programs
SCE-15-SW-009A	Technology Development Support	Emerging Technology Programs
SCE-15-SW-009B	Technology Assessments	Emerging Technology Programs
SCE-15-SW-009C	Technology Introduction Support	Emerging Technology Programs
SCE-15-SW-010	**Workforce Education & Training**	WE&T Programs
SCE-15-SW-010A	WE&T Centergies	WE&T Programs
SCE-15-SW-010B	WE&T Connections	WE&T Programs
SCE-15-SW-010C	WE&T Planning	WE&T Programs
SCE-15-L-001	**Integrated Demand Side Management Pilot for Food Processir**	Industrial 3P Programs
SCE-15-L-002	**Energy Leader Partnership Program**	Government Partnerships
SCE-15-L-002Roll	Energy Leader Partnership Program	Government Partnerships
SCE-15-L-002A	City of Beaumont Energy Leader Partnership	Government Partnerships
SCE-15-L-002B	City of Long Beach Energy Leader Partnership	Government Partnerships
SCE-15-L-002C	City of Redlands Energy Leader Partnership	Government Partnerships
SCE-15-L-002D	City of Santa Ana Energy Leader Partnership	Government Partnerships
SCE-15-L-002E	City of Simi Valley Energy Leader Partnership	Government Partnerships
SCE-15-L-002F	Gateway Cities Energy Leader Partnership	Government Partnerships
SCE-15-L-002G	Community Energy Leader Partnership	Government Partnerships
SCE-15-L-002H	Eastern Sierra Energy Leader Partnership	Government Partnerships
SCE-15-L-002I	Energy Leader Partnership Strategic Support	Government Partnerships
SCE-15-L-002J	Desert Cities Energy Leader Partnership	Government Partnerships
SCE-15-L-002K	Kern County Energy Leader Partnership	Government Partnerships
SCE-15-L-002L	Orange County Cities Energy Leader Partnership	Government Partnerships
SCE-15-L-002M	San Gabriel Valley Energy Leader Partnership	Government Partnerships
SCE-15-L-002N	San Joaquin Valley Energy Leader Partnership	Government Partnerships
SCE-15-L-002O	South Bay Energy Leader Partnership	Government Partnerships
SCE-15-L-002P	South Santa Barbara County Energy Leader Partnership	Government Partnerships
SCE-15-L-002Q	Ventura County Energy Leader Partnership	Government Partnerships
SCE-15-L-002R	Western Riverside Energy Leader Partnership	Government Partnerships
SCE-15-L-002S	City of Adelanto Energy Leader Partnership	Government Partnerships
SCE-15-L-002T	West Side Energy Leader Partnership	Government Partnerships
SCE-15-L-002U	Local Government Strategic Planning Pilot Program	Government Partnerships
SCE-15-L-003	**Institutional and Government Core Energy Efficiency Partners**	Government Partnerships
SCE-15-L-003A	California Community Colleges Energy Efficiency Partnership	Government Partnerships
SCE-15-L-003B	California Dept. of Corrections and Rehabilitation EE Partnership	Government Partnerships
SCE-15-L-003C	County of Los Angeles Energy Efficiency Partnership	Government Partnerships
SCE-15-L-003D	County of Riverside Energy Efficiency Partnership	Government Partnerships
SCE-15-L-003E	County of San Bernardino Energy Efficiency Partnership	Government Partnerships
SCE-15-L-003F	State of California Energy Efficiency Partnership	Government Partnerships

New/Existing Program #	Main Program Name / Sub-Program Name	Utility Grouping
SCE-15-L-003G	UC/CSU Energy Efficiency Partnership	Government Partnerships
SCE-15-TP-001	**Comprehensive Manufactured Homes**	Residential 3P Programs
SCE-15-TP-002	**Cool Planet**	Commercial 3P Programs
SCE-15-TP-003	**Healthcare EE Program**	Commercial 3P Programs
SCE-15-TP-004	**Data Center Energy Efficiency**	Commercial 3P Programs
SCE-15-TP-005	**Lodging EE Program**	Commercial 3P Programs
SCE-15-TP-006	**Food & Kindred Products**	Industrial 3P Programs
SCE-15-TP-007	**Primary and Fabricated Metals**	Industrial 3P Programs
SCE-15-TP-008	**Nonmetallic Minerals and Products**	Industrial 3P Programs
SCE-15-TP-009	**Comprehensive Chemical Products**	Industrial 3P Programs
SCE-15-TP-010	**Comprehensive Petroleum Refining**	Industrial 3P Programs
SCE-15-TP-011	**Oil Production**	Industrial 3P Programs
SCE-15-TP-012	**Refinery Energy Efficiency Program**	Industrial 3P Programs
SCE-15-TP-013	**Cool Schools**	Commercial 3P Programs
SCE-15-TP-014	**Commercial Utility Building Efficiency**	Commercial 3P Programs
SCE-15-TP-017	**Energy Efficiency for Entertainment Centers**	Commercial 3P Programs
SCE-15-TP-018	**School Energy Efficiency Program**	Commercial 3P Programs
SCE-15-TP-019	**Sustainable Communities**	New Construction
SCE-15-TP-020	**IDEEA365 Program**	Commercial/Industrial/Agricultural 3P P
SCE-15-TP-021	**Enhanced Retrocommissioning**	Commercial 3P Programs
	Retail Energy Action Program	
	Outreach/Statewide ME&O (Pre 2013)	
	Total SCE Program	
EM&V	**EM&V (SCE & CPUC Portions)**	**EM&V**
	EM&V - CPUC	EM&V
	EM&V - SCE	EM&V
	SCE Total with EM&V	
Other Program	**SoCalREN**	**REN**
	Total SCE Portfolio EM&V	

1. 2013 Actual Spent means funds expensed, including accruals, for program activities oc
2. Total 2013 Authorized and Unspent means the 2013-14 authorized budget annualized
3. 2013 Committed and/or encumbered funds means funds that are associated with indiv
4. 2013 Unspent available for 2015 are total unspent uncommitted funds and not planned
5. Detail for pre-2010 may be shown by fund shifting category or sector/area if a matching

Appendix C

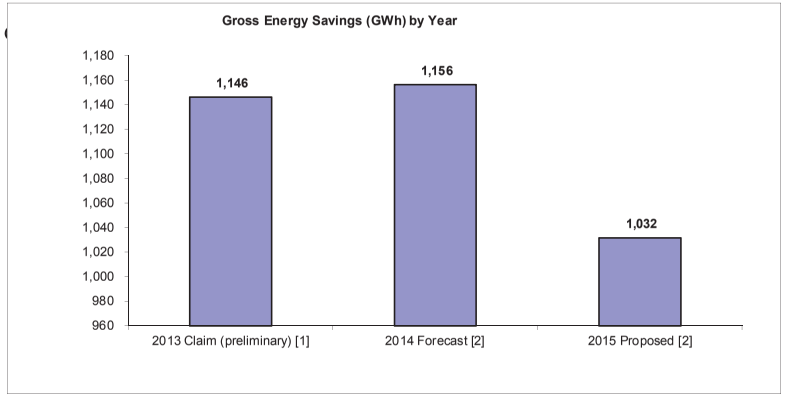
2015 Savings Allocation and Funding Sources Detail

Southern California Edison - Appendix C

Table 1.1 - 2013-2015 GROSS Annual Savings Impacts by Year

	2013 Claim (preliminary) [1]			2014 Forecast [2]			2015 Proposed [2]		
	Total	CPUC Goal	% of 2013 Goal	Total	CPUC Goal	% of 2014 Goal	Total	CPUC Goal	% of 2015 Goal
Energy Savings (**Gross** GWh)	1,146	922	124%	1,156	924	125%	1,032	983	102%
Demand Reduction (**Gross** MW)	190	181	105%	205	177	116%	182	160	109%
Gas Savings (**Gross** MMTh)									

1. 2013 claim includes Energy Savings Assistance, Codes & Standards, and CFL Carryover, but exclude SoCalREN
2. 2014 forecast and 2015 proposed savings inlcude Energy Savings Assistance, Codes & Standards, but exclude SoCalREN.



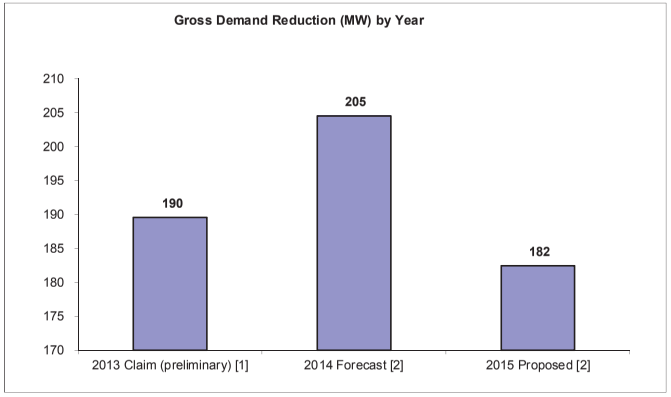


Table 1.2 - 2015 Total Requested Budget and Projected Gross Portfolio Savings Impacts By Sector and End Use

	Budget (millions) [1]		Energy Savings (Gross GWh)		Demand Reduction (Gross MW)		Gas Savings (Gross MMTh) [5]	
Total Portfolio	**Total**	**% of Total**	**Total**	**% of Total**	**Total**	**% of Total**	**Total**	**% of Total**
Residential	$ 101.15	29.0%	189.74	18.4%	34.81	19.1%	-	
Appliances	$ 11.97	3.4%	29.20	2.8%	5.52	3.0%		
Consumer Electronics	$ 0.20	0.1%	0.13	0.0%	0.02	0.0%		
Cooking Appliances	$ -	0.0%	-	0.0%	-	0.0%		
HVAC	$ 23.46	6.7%	7.50	0.7%	7.36	4.0%		
Lighting	$ 42.72	12.2%	128.71	12.5%	14.60	8.0%		
Pool Pump	$ 10.22	2.9%	12.88	1.2%	1.95	1.1%		
Refrigeration		0.0%	-	0.0%	-	0.0%		
Water Heating	$ 0.06	0.0%	0.17	0.0%	0.03	0.0%		
Audits, Surveys and Other [5]	$ 12.51	3.6%	11.15	1.1%	5.32	2.9%		
Nonresidential	$ 176.74	50.7%	465.41	45.1%	88.22	48.3%	-	
HVAC	$ 59.49	17.1%	136.81	13.3%	31.11	17.1%		
Lighting	$ 70.10	20.1%	203.50	19.7%	39.78	21.8%		
Office	$ 2.10	0.6%	11.17	1.1%	0.63	0.3%		
Process	$ 20.80	6.0%	97.34	9.4%	14.92	8.2%		
Refrigeration	$ 4.74	1.4%	16.58	1.6%	1.77	1.0%		
Audits, Surveys and Other [5]	$ 19.50	5.6%		0.0%	-	0.0%		
Government Partnerships [2]	**$ 25.82**	**7.4%**	**51.45**	**5.0%**	**6.33**	**3.5%**		
Codes & Standards	**$ 5.98**	**1.7%**	**291.50**	**28.3%**	**45.58**	**25.0%**		
EM&V	**$ 13.65**	**3.9%**	**NA**	**NA**	**NA**	**NA**		
REN	**$ 25.47**	**7.3%**	**NA**	**NA**	**NA**	**NA**		
Low Income Energy Efficiency	**NA**	**NA**	**33.50**	**3.2%**	**7.54**	**4.1%**		
Total	**$ 348.80**		**$ 1,031.60**		**$ 182.47**			

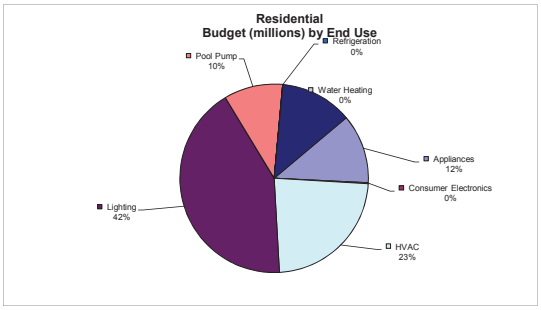
CPUC 2015 Goal (including C&S)			**983.00**		**160.10**			

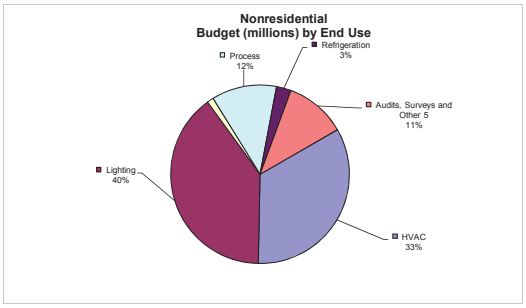
1 - The total budget by market sector is the sum of all administrative, marketing and direct implementation incentive and non-incentive costs included in the 2015 budget request. Cross cutting core and third party programs are allocated to the appropriate market sector where energy savings are expected to be realized.

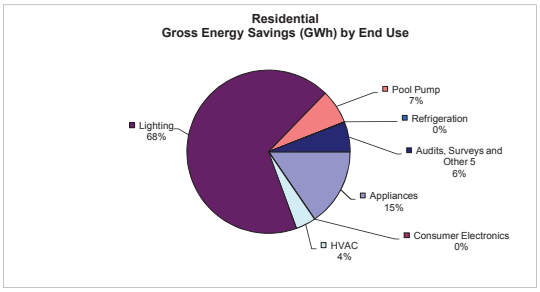
2 - Includes all Local and Statewide Government Partnership programs.

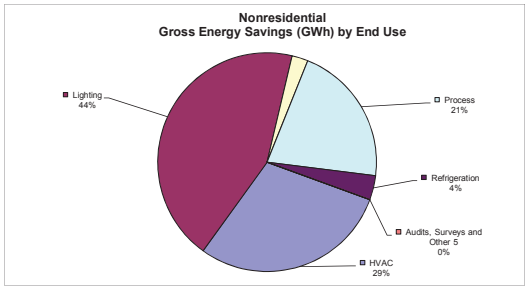
4 - All reporting of low income follows the same residential headings except HVAC. HVAC includes Heating Systems, Cooling Measures, Infiltration, Weatherization and Space Conditioning.

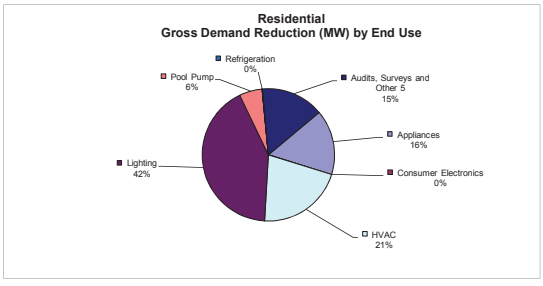
5 - Negative gas therm savings are due to interactive effects.











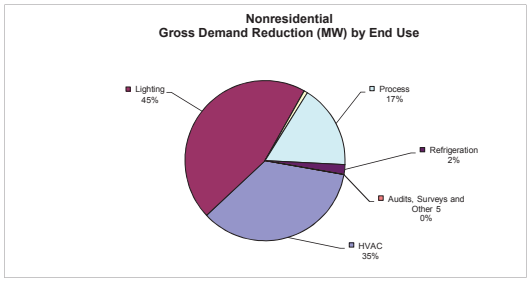
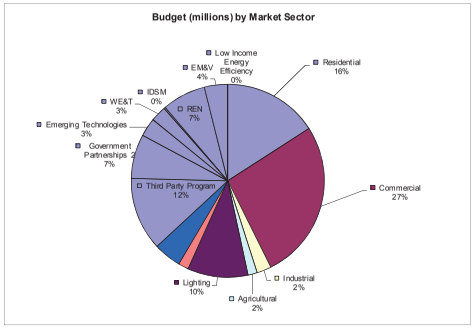
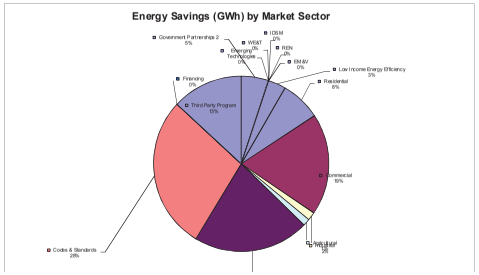


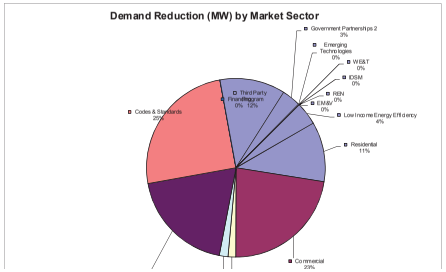
Table 1.3 - 2015 Requested Budget and Projected Savings Impacts of Resource Programs by Market Sector

Market Sector	Budget (millions) [1]	% of Total	Energy Savings (Gross GWh)	% of Total	Demand Reduction (Gross MW)	% of Total	Gas Savings (Gross MMTh) [3]	% of Total
Residential	$ 55.40	16%	76.55	7%	19.81	11%		
Commercial	$ 93.36	27%	193.23	19%	41.06	23%		
Industrial	$ 8.45	2%	15.49	2%	2.55	1%		
Agricultural	$ 5.48	2%	13.27	1%	2.86	2%		
Lighting	$ 35.25	10%	220.57	21%	34.96	19%		
Codes & Standards	$ 5.98	2%	291.50	28%	45.58	25%		
Financing	$ 16.29	5%	-	0%	-	0%		
Third Party Program	$ 42.82	12%	135.08	13%	21.62	12%		
Government Partnerships [2]	$ 25.82	7%	51.45	5%	6.33	3%		
Emerging Technologies	$ 10.77	3%		0%	-	0%		
WE&T	$ 9.16	3%	0.96	0%	0.16	0%		
IDSM	$ 0.89	0%		0%		0%		
REN	$ 25.47	7%		0%		0%		
EM&V	$ 13.65	4%		0%		0%		
Low Income Energy Efficiency	NA	NA	33.50	3%	7.54	4%		
Total [4]	**$ 348.80**		**1,031.60**		**182.47**			
CPUC 2015 Goal (including C&S)			983.00		160.10		-	

1 - The total budget by market sector is the sum of all administrative, marketing and direct implementation incentive and non-incentive costs included in the 2015 budget request. Cross cutting core and third party programs are allocated to the appropriate market sector where energy savings are expected to be realized.
2 - Includes all Local and Statewide Government Partnership programs.
3 - Negative gas therm savings are due to interactive effects.







Southern California Edison - Appendix C

Table 2.1 -Bill Payer Impacts - Rates by Customer Class

	Electric Average Rate (Res and Non-Res) $/kwh [1]	Gas Average Rate (Res and Non-Res) $/therm	Total Average Bill Savings by Year ($) [2], [4]	Total Average Lifecycle Bill Savings ($) [3], [4]
Present Rates - System Average				
2013 [5]	$ 0.1572		$ 87,209,070	$ 981,191,659
2014	$ 0.1663		$ 137,951,228	$ 1,191,984,204
2015	$ 0.1688		$ 130,405,196	$ 1,204,181,489

[1] SCE's average rate electric rate for bundled-service customers
[2] Average first year electric bill savings is calculated by multiplying an average electric rate with first year net kWh energy savings.
[3] Average lifecycle electric bill savings is calculated by multiplying an average electric rate with lifecycle net kWh energy savings.
[4] Total average bill savings and lifecycle savings exclude the impacts of SCE's Energy Assistance Savings and S.Cal REN programs

Table 2.1a-b

	2014 Total Electric Annual Revenue $000 [1]	2014 Energy Efficiency Portion of Total Electric Annual Revenue $000 [2], [3]	2015 Proposed Energy Efficiency Electric Annual Revenue Change $000	2015 Proposed Percentage Change In Electric Revenue and Rates [4]	2014 Electric Average Rate $/KWh [1] , [2]	2014 Energy Efficiency Portion of Electric Average Rate $/KWh	2015 Proposed Electric Average Rate Change $/KWh	2015 Proposed Percentage Change In Electric Revenue and Rates
Bundled [5]								
Domestic	$ 5,491,770	$ 90,365	$ 22,572	25%	$ 0.1770	$ 0.0029	$ 0.0007	25%
Lighting Small Medium Power	$ 4,400,606	$ 67,830	$ 16,943	25%	$ 0.1810	$ 0.0028	$ 0.0007	25%
Large Power	$ 2,083,239	$ 31,324	$ 7,824	25%	$ 0.1280	$ 0.0019	$ 0.0005	25%
Ag & Pumping	$ 404,255	$ 6,535	$ 1,632	25%	$ 0.1420	$ 0.0023	$ 0.0006	25%
Streetlights	$ 133,452	$ 2,253	$ 563	25%	$ 0.1840	$ 0.0031	$ 0.0008	25%
Direct Access Service [6]								
Domestic	$ 5,985	$ 225	$ 56	25%	$ 0.1030	$ 0.0039	$ 0.0010	25%
Lighting Small Medium Power	$ 312,534	$ 13,070	$ 3,265	25%	$ 0.0730	$ 0.0031	$ 0.0008	25%
Large Power	$ 354,660	$ 13,521	$ 3,377	25%	$ 0.0510	$ 0.0019	$ 0.0005	25%
Ag & Pumping	$ 5,477	$ 225	$ 56	25%	$ 0.0700	$ 0.0029	$ 0.0007	25%
Streetlights	$ 1,735	$ -	$ -	0%	$ 0.0800	$ -	$ -	0%

[1] Revenues and average rate levels based on estimated 2014 ERRA revenue with the following assumptions:
a. Reduction of $466 M (for Net SONGS Costs) fro the forecasted 2014 ERRA Generation Revenue requirement for Bundled Service customers.
b. Residential CA Climate, Credit estimated to be $80/year in 2014 and reflected as cents per KWh in rates.
c. GHG Offsets included in rate levels.
d. EITE Climate Credit included in rate levels.
[2] Allocation percentage based on 2013 ERRA PPPC revenues
[3] Decision D 12-11015 authorized Southern California Edison to offset 2014 revenue requirement with $127.3 M unspent, uncommitted funds from 2010-2012 funding cycle.
[4] Proposed revenue and rate changes compare to total revenues and rates effective January 1, 2014.
[5] Customers who receive electric generation as well as transmission and distribution service from SCE

Southern California Edison - Appendix C

Table 2.2 - Budget and Cost Recovery by Funding Source

		2015
2015 EE Portfolio Budget	$	348,797,566
Unspent/Uncommitted EM&V Carryover Funds	$	21,300,000
Unspent/Uncommitted Program Carryover Funds	$	45,858,000
Total Funding Request for 2015 EE Portfolio	**$**	**281,639,566**

Budget by Funding Source

2015 Authorized (Before Carryonver)		2015 Budget	Allocation	
Electric Procurement EE Funds	$	348,797,566	100%	
Gas PPP Surcharge Funds	$	-	0%	<-- Enter this value only (other allocations are calculated)
Total Funds	$	348,797,566		

Revenue Requirement for Cost Recovery by Funding Source

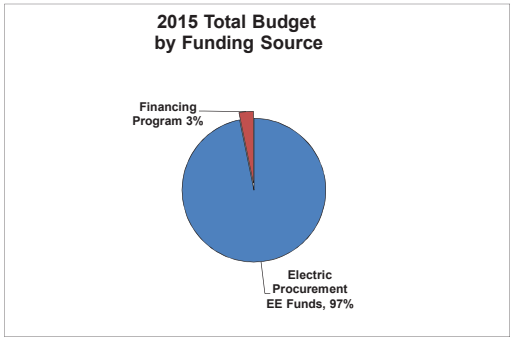
2015 Authorized Funding in Rates (including Carryonver)		2015 Revenue Requirement	Allocation after Carryover adjustment
Procurement EE Funds	$	281,639,566	100%
Gas PPP Surcharge Funds	$	-	0%
Total Funds	$	281,639,566	

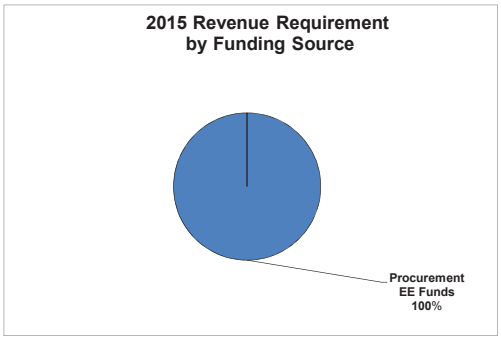
Unspent/Uncommitted Carryover Funds (in positive $ amonts)

Total Unspent/Uncommitted Funds	Electric PGC	Electric Procurement	Total Electric	Gas	Total
2013-2014	$ -	$ -	$ -	$ -	**$ -**
2010-2012	$ -	$ 38,800,000.00	$ 38,800,000	$ -	**$ 38,800,000**
Total pre-2010 (2009, 2006-2008, 1998-2005)	$ -	$ 21,300,000.00	$ 21,300,000	$ -	**$ 21,300,000**
Total Pre-2015	**$ -**	$ 7,058,000.00	$ 7,058,000.00	**$ -**	**$ 7,058,000**

EM&V Unspent/Uncommitted Funds	Electric PGC	Electric Procurement	Electric	Gas	Total
2013-2014	$ -	$ -	$ -	$ -	**$ -**
2010-2012	$ -		$ -	$ -	**$ -**
Total pre-2010 (2009, 2006-2008, 1998-2005)	$ -	$ 21,300,000	$ 21,300,000	$ -	**$ 21,300,000**
Total Pre-2015	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Program Unspent/Uncommitted Funds	Electric PGC	Electric Procurement	Electric	Gas	Total
2013-2014	$ -	$ -	$ -	$ -	**$ -**
2010-2012	$ -	$ 38,800,000	$ 38,800,000	$ -	**$ 38,800,000**
Total pre-2010 (2009, 2006-2008, 1998-2005)	$ -	$ -	$ -	$ -	**$ -**
Total Pre-2015	**$ -**	$ 7,058,000	$ 7,058,000	**$ -**	**$ 7,058,000**





Southern California Edison - Appendix C

Table 3.1 - Caps & Targets Report

IOU Cap & Targets Forecast				
	Administrative [1]	Marketing	Direct Implementation [2]	EM&V
2015 Proposed Budget				
IOU Budget	$ 24,360,851	$ 7,784,496	$ 47,628,548	$ -
SCE EM&V Budget	$ -	$ -	$ -	$ 3,686,126
GRC Labor Adders (Pensions, Benefits & Payroll Taxes)	$ 6,124,213	$ 598,017	$ 13,155,787	$ 275,521
Total	$ 30,485,064	$ 8,382,513	$ 60,784,335	$ 3,961,647

2015 Proposed Budget [3]	$	368,951,104

IOU Cap/Targets Forecast	IOU Admin Cap	IOU Marketing Target	IOU Direct Impl. Target	EM&V Target
	8.26%	2.27%	16.47%	0.07%

[1] 10% cap requirement based on D. 09-09-047 is set for IOU only

[2] Direct Implementation Target Exempt Programs include: Codes & Standards, Emerging Technologies, Workforce Education & Training (including Community Language Efficiency Outreach and HVAC Workforce Education & Training), Integrated Demand Side Management Pilot for Food Processing, Commercial-Continuous Energy Improvement, Commercial-Energy Advisor, Industrial-Continuous Energy Improvement, Industrial-Energy Advisor, Agriculture Continuous Energy Improvement, Agriculture-Energy Advisor (including Pump Test), Residential Energy Advisor - On Line Buyer's Guide, Cool Planet, Sustainable Communities, Energy Leader Partnership Strategic Support, Statewide Finance Program, Southern California Regional Energy Network, and Local Government Strategic Planning Pilot Program

[3] 2015 Propose Budget includes GRC labor adders (pensions, benefits & payroll taxes)

Appendix D

2015 Portfolio Cost-Effectiveness Analysis

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE

STATE OF CALIFORNIA

Order Instituting Rulemaking Concerning Energy Efficiency Rolling Portfolios, Policies, Programs, Evaluation, and Related Issues.	Rulemaking 13-11-005 Filed November 14, 2013

SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) REQUEST FOR FUNDING OF ENERGY EFFICIENCY AND DEMAND RESPONSE INTEGRATED DEMAND SIDE MANAGEMENT PROGRAMS AND BUDGETS FOR 2015

JANET S. COMBS
MONICA GHATTAS

Attorneys for
SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770
Telephone: (626) 302-3623
Facsimile: (626) 302-6693
E-mail: monica.ghattas@sce.com

Dated: **March 26, 2014**

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE

STATE OF CALIFORNIA

Order Instituting Rulemaking Concerning Energy Efficiency Rolling Portfolios, Policies, Programs, Evaluation, and Related Issues.	Rulemaking 13-11-005 Filed November 14, 2013

SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) REQUEST FOR FUNDING OF ENERGY EFFICIENCY AND DEMAND RESPONSE INTEGRATED DEMAND SIDE MANAGEMENT PROGRAMS AND BUDGETS FOR 2015

Pursuant to Rule 1.9 of the California Public Utilities Commission (Commission) Rules of Practice and Procedure, Southern California Edison Company (SCE) hereby provides notice to the service list in Rulemaking (R.)13-11-005 that SCE's REQUEST FOR FUNDING OF ENERGY EFFICIENCY AND DEMAND RESPONSE INTEGRATED DEMAND SIDE MANAGEMENT PROGRAMS AND BUDGETS FOR 2015, APPENDIX D is posted on SCE's website as of March 26, 2014.

This document may be accessed on SCE's website as follows:

- Go to *www.sce.com;*
- Click on the "Regulatory Information" link at the bottom right of the page;
- Select "CPUC Open Proceedings;"
- Enter "R.13-11-005" in the search box and click "GO."

The posted documents are voluminous and, therefore, copies of them can be made available on CD-ROM upon request to SCE Case Administration. Case Administration can be reached at (626) 302-1063 or case.admin@sce.com.

Respectfully submitted,

JANET S. COMBS
MONICA GHATTAS

/s/ Monica Ghattas
By: Monica Ghattas

Attorneys for
SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770
Telephone: (626) 302-3623
Facsimile: (626) 302-6693
E-mail: monica.ghattas@sce.com

March 26, 2014

Appendix E

2015 Workpaper Adjustment Factors & Proposed Workpapers

Solution Code	2014 DEER/ 2013 Code Impact	T24 Occ Factor	2015 Code Only Impact	2015 Code Status	High Risk Reduc Factor	Final derating Factor	Factor ID (see Tab)	Measure Specifc Details for Adjustment Factor		
AC-18793					30%	30%	1		>= 65 kBtu/hr Variable Refrigerant Flow Heat Pump DX Equipment replacing Package Variable Air Volume	SCE13HC036.0
AC-20693					30%	30%	1		>= 65 kBtu/hr Variable Refrigerant Flow Heat Pump DX Equipment replacing Single Zone Package AC	SCE13HC036.0
AC-39286					30%	30%	1		>= 65 kBtu/hr Variable Refrigerant Flow Heat Pump DX Equipment replacing Single Zone Package Heat Pump	SCE13HC036.0
AC-49676					30%	30%	1		>= 65 kBtu/hr Variable Refrigerant Flow Heat Recovery DX Equipment replacing Package Variable Air Volume	SCE13HC036.0
AC-57395					30%	30%	1		>= 65 kBtu/hr Variable Refrigerant Flow Heat Recovery DX Equipment replacing Single Zone Package AC	SCE13HC036.0
AC-69593					30%	30%	1		>= 65 kBtu/hr Variable Refrigerant Flow Heat Recovery DX Equipment replacing Single Zone Package Heat Pump	SCE13HC036.0
AC-49868					33%	33%	2		<24 kBtu/hr 16 SEER Ductless AC DX Equipment replacing 13 SEER AC	SCE13HC032.0
AC-54839					33%	33%	2		<24 kBtu/hr 19 SEER Ductless AC DX Equipment replacing 13 SEER AC	SCE13HC032.0
AC-39892					35%	35%	3		<65 kBtu/hr 16 SEER Mini-Split Heat Pump DX Equipment replacing Split System Air Conditioner	SCE13HC033.0
AC-67222					35%	35%	3		<65 kBtu/hr 16 SEER Multi-Split Heat Pump DX Equipment replacing Split System Air Conditioner	SCE13HC033.0
AC-70999					35%	35%	3		<65 kBtu/hr 19 SEER Mini-Split Heat Pump DX Equipment replacing Split System Air Conditioner	SCE13HC033.0
AC-80111					35%	35%	3		<65 kBtu/hr 19 SEER Multi-Split Heat Pump DX Equipment replacing Split System Air Conditioner	SCE13HC033.0
AC-95843					35%	35%	3		<65 kBtu/hr 22 SEER Mini-Split Heat Pump DX Equipment replacing Split System Air Conditioner	SCE13HC033.0
AC-38724	0%	0%	100%	Cancel		100%	4	The solution code required effeciency is 14 SEER.	<65 kBtu/hr 14.0 SEER (12.15 EER) Split System Heat Pump DX Equipment	SCE13HC019.0
AC-39023	54%	0%	0%			54%	4	The solution code required effeciency is 14 SEER. 10% kWh/ 19% kW Reduction from DEER	65-135 kBtu/hr 12 EER or 13.8 IEER Air Source Unitary Air Conditioner DX Equipment	SCE13HC035.1
AC-46373	0%	0%	67%			67%	4	The solution code required effeciency is	<65 kBtu/hr 15.0 SEER (12.70 EER) Split System Heat Pump DX Equipment	SCE13HC019.0
AC-71098	0%	0%	100%	Cancel		100%	4	The solution code required effeciency is	<65kBtu/hr 14 SEER (11.6 EER/12 EER) Package/Split System Air Conditioner DX Equipment	SCE13HC012.1

AC-19484	17%		10%			27%	5	The solution code required efficiency is 11.5 EER. 6% kWh Increase &	65-135 kBtu/hr 11.5 EER or 12.8 IEER Air Source Unitary Air Conditioner DX Equipment	SCE13HC035.1
AC-75859	54%	0%	46%	Cancel		100%	5	6% kWh/ 14% kW Reduction from DEER 11 to 14, DEER Measure ID: NE-HVAC-airAC-SpltPkg-gte760kBtuh-10p2eer. There is no DEER Measure for 10 EER efficiency so AC-85488 derating factor should be used The solution code required efficiency is 10 EER< 2015 code eff.	≥760 kBtu/hr 10 EER or 10.9 IEER Air Source Unitary Air Conditioner DX Equipment	SCE13HC035.1
AC-21019	8%					8%	6	9% kWh/ 7% kW Reduction from DEER 11 to 14, DEER	< 150 tons - IPLV <= 0.541 - FL <= 0.790 (Tier 1) High Efficiency Water-Cooled Variable or Constant Speed Screw or Scroll Compressor Chiller	SCE13HC043.0
AC-28103	15%					15%	6	16% kWh/ 14% kW Reduction from DEER 11 to 14, DEER Measure ID: NE-HVAC-Chlr-Screw-gte300tons-0p511kwpton	>= 300 tons - IPLV <= 0.515 - FL <= 0.639 (Tier 1) High Efficiency Water-Cooled Variable or Constant Speed Screw or Scroll Compressor Chiller	SCE13HC043.0
AC-37854	4%	0%				4%	6	DEER 05 savings are carried over to DEER 14 in READI v.1.0.4. Measure ID: D03-084, D03-099, D03-100	<=24 kBtu/hr High Efficiency Package Terminal Heat Pump DX Equipment	SCE13HC007.0
AC-38845	2%					2%	6	2% kWh/ 1% kW Reduction from DEER 11 to 14, DEER Measure ID:NE-HVAC-Chlr-Screw-150to299tons-0p574kwpton	150 - 299 tons - IPLV <= 0.502 - FL <= 0.718 (Tier 1) High Efficiency Water-Cooled Variable or Constant Speed Screw or Scroll Compressor Chiller	SCE13HC043.0

AC-47483	54%		0%			54%	6	43% kWh/ 40% kW Reduction from DEER 11 to 14, DEER Measure ID: NE-HVAC-airAC-SpltPkg-135to239kBtuh-11p5eer. For 2015:The solution code required effeciency is 15 SEER (21%)	135-240 kBtu/hr 11.5 EER or 12.3 IEER Air Source Unitary Air Conditioner DX Equipment	SCE13HC035.1
AC-58348	54%		0%			54%	6	48% kWh/ 47% kW Reduction from DEER 11 to 14, DEER Measure ID: NE-HVAC-airAC-SpltPkg-135to239kBtuh-12p0eer. For 2015: The solution code required effeciency is 15 SEER (6%)	135-240 kBtu/hr 12 EER or 13 IEER Air Source Unitary Air Conditioner DX Equipment	SCE13HC035.1
AC-84788	54%		0%			54%	6	6% kWh/ 14% kW Reduction from DEER 11 to 14, DEER Measure ID: NE-HVAC-airAC-SpltPkg-240to759kBtuh-10p5eer. For 2015: The solution code required efficiency is 10.5 EER (46%).	240-760 kBtu/hr 10.5 EER or 11.1 IEER Air Source Unitary Air Conditioner DX Equipment	SCE13HC035.1
AC-85488	54%		0%			54%	6	6% kWh/ 14% kW Reduction from DEER 11 to 14, DEER Measure ID: NE-HVAC-airAC-SpltPkg-gte760kBtuh-10p2eer. For 2015: The solution code required efficiency is 10.2 EER (46%).	≥760 kBtu/hr 10.2 EER or 12.8 IEER Air Source Unitary Air Conditioner DX Equipment	SCE13HC035.1

AC-97352	54%	0%				54%	6	DEER 05 savings are carried over to DEER 14 in READI v.1.0.4. Measure ID: D03-051	Variable Speed Drive on HVAC Fan Control	SCE13HC050.0
AC-97843	10%	0%				10%	6	6% kWh/ 14% kW Reduction from DEER 11 to 14, DEER Measure ID: NE-HVAC-airAC-SpltPkg-240to759kBtuh-10p8eer.	240-760 kBtu/hr 10.8 EER or 12 IEER Air Source Unitary Air Conditioner DX Equipment	SCE13HC035.1
LT-10121	0%	8%				8%	8		Up to 70 Watt Exterior Fixture CFL replacing less than 100 Watt lamp base case	SCE13LG007.0
LT-10154	0%	8%				8%	8		(3) 48in Reduced 28 Watt (1) Instant Start Ballast - Reduced Light Output T8 Linear Fluorescent replacing (3) 48in T8 Linear Fluorescent	SCE13LG087.0
LT-10232		8%				8%	8		(4) 46in (2) Programmed Start Ballast - Normal Light Output - HO T5 Linear Fluorescent replacing 400 Watt Mercury Vapor	SCE13LG086.0
LT-10494	0%	8%				8%	8		(2) U-Tube (1) Instant Start Ballast - Normal Light Output T8 Linear Flourescent replacing (2) T12 U-Tube Fluorescent	SCE13LG087.0
LT-10663	0%	8%				8%	8		Up to 70 Watt Exterior Fixture Induction replacing less than or equal to 100 Watt lamp base case	SCE13LG102.0
LT-12866		8%				8%	8		Up to 128 Watt Interior Fixture T5 Linear Flourescent replacing 101 - 175 Watt lamp base case	SCE13LG086.0
LT-12877	0%	8%				8%	8		(1) 36in (1) Premium Instant Start Ballast - Reduced Light Output T8 Linear Flourescent replacing (1) 36in T12 Linear Fluorescent (per lamp)	SCE13LG087.0
LT-15425	0%	8%				8%	8		(2) 48in (2) Premium Instant Start Ballast - Reduced Light Output w/ Reflector T8 Linear Flourescent replacing (4) 48in T8 RLO Linear Fluorescent	SCE13LG087.0
LT-17083		8%				8%	8		Up to 70 Watt Interior Fixture CFL replacing less than 100 Watt lamp base case	SCE13LG085.2
LT-17432	0%	8%				8%	8		Integrated Ballast Ceramic Metal Halide	SCE13LG054.0
LT-18409	0%	8%				8%	8		(2) 48in (1) Instant Start Ballast - Reduced Light Output T8 Linear Fluorescent replacing (1) 96in T12 Linear Fluorescent	SCE13LG087.0
LT-18545	0%	8%				8%	8		(2) 48in (1) Instant Start Ballast - Normal Light Output w/ Reflectors and A/B Switching T8 Linear Fluorescent replacing (3) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-18642	0%	8%				8%	8		(1) 36in (1) Premium Instant Start Ballast - Reduced Light Output T5 Linear Flourescent replacing (1) 36in T12 Linear Fluorescent (per lamp)	SCE13LG087.0
LT-18743	0%	8%				8%	8		(8) 48in (2) Instant Start Ballast - Reduced Light Output T8 Linear Fluorescent replacing (4) 96in T12 Linear Fluorescent	SCE13LG087.0

LT-18934	0%	8%				8%	8		(2) 48in Reduced 28 Watt (1) Instant Start Ballast w/ Reflectors T8 Linear Fluorescent replacing (2) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-18943	0%	8%				8%	8		(1) 24in (1) Premium Instant Start Ballast - Reduced Light Output T8 Linear Flourescent replacing (1) 24in T12 Linear Fluorescent	SCE13LG087.0
LT-19235	0%	8%				8%	8		(4) 96in (1) Instant Start Ballast - Normal Light Output T8 Linear Fluorescent replacing (4) 96in T12 Linear Fluorescent	SCE13LG087.0
LT-20483	0%	8%				8%	8		(4) 48in (2) Instant Start Ballast - Reduced Light Output T8 Linear Fluorescent replacing (4) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-20983	0%	8%				8%	8		(1) 96in (1) Instant Start Ballast - Reduced Light Output T8 Linear Fluorescent replacing (1) 96in T12 Linear Fluorescent	SCE13LG087.0
LT-21067	0%	8%				8%	8		Up to 120 Watt Exterior Fixture Induction replacing 176 - 200 Watt lamp base case	SCE13LG102.0
LT-21092		8%				8%	8		175 Watt Pulse Start HID replacing 250 Watt Metal Halide	SCE13LG046.1
LT-24162	0%	8%				8%	8		(2) U-Tube (1) Instant Start Ballast - Normal Light Output w/ Reflectors T8 Linear Flourescent replacing (2) T12 U-Tube Fluorescent	SCE13LG087.0
LT-24981	0%	8%				8%	8		(2) 48in (1) Premium Instant Start Ballast - High Light Output T8 Linear Flourescent replacing (2) 96in T12 Linear Fluorescent	SCE13LG087.0
LT-24985	0%	8%				8%	8		(2) 48in Reduced 28 Watt (1) Instant Start Ballast w/ Reflectors T8 Linear Fluorescent replacing (3) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-26100		8%				8%	8		Up to 244 Watt (Tier 1) Interior Fixture T5 Linear Flourescent replacing 400 Watt lamp base case	SCE13LG086.0
LT-26133		8%				8%	8		Up to 244 Watt (Tier 1) Interior Fixture CFL replacing greater than 400 Watt lamp base case	SCE13LG085.2
LT-26734	0%	8%				8%	8		Up to 120 Watt Interior Fixture Induction replacing 101 - 175 Watt lamp base case	SCE13LG090.0
LT-27685	0%	8%				8%	8		(2) 96in (1) Instant Start Ballast - Reduced Light Output T8 Linear Fluorescent replacing (2) 96in T12 Linear Fluorescent	SCE13LG087.0
LT-28754		8%				8%	8		(6) 46in (3) Programmed Start Ballast - Normal Light Output - HO T5 Linear Fluorescent replacing 400 Watt Pulse Start HID	SCE13LG086.0
LT-30612	0%	8%				8%	8		(1) 46in Reduced 49 Watt (1) Instant Start Ballast - Normal Light Output T5 Linear Flourescent replacing (1) 46in T5 Linear Fluorescent (per lamp)	SCE13LG087.0
LT-30765	0%	8%				8%	8		(2) 48in Reduced 28 Watt (1) Instant Start Ballast w/ Reflectors T8 Linear Fluorescent replacing (4) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-32000	0%	8%				8%	8		(2) 24in F17 (1) Premium Instant Start Ballast - Normal Light Output T8 Linear Fluorescent replacing (2) T8 U-Tube Fluorescent	SCE13LG087.0
LT-32645	0%	8%				8%	8		(2) 48in Reduced 28 Watt (1) Instant Start Ballast - Reduced Light Output T8 Linear Fluorescent replacing (2) 48in T8 Linear Fluorescent	SCE13LG087.0
LT-33489		8%				8%	8		Up to 192 Watt Interior Fixture CFL replacing 176 - 399 Watt lamp base case	SCE13LG085.2

LT-33633	0%	8%				8%	8		(1) 36in (1) Instant Start Ballast - Normal Light Output T8 Linear Flourescent replacing (1) 36in T12 Linear Fluorescent	SCE13LG087.0
LT-34098	0%	8%				8%	8		Up to 250 Watt (Tier 1) Interior Fixture Induction replacing 400 Watt lamp base case	SCE13LG090.0
LT-35561	0%	8%				8%	8		Up to 175 Watt Exterior Fixture Pulse Start HID replacing 201 - 399 Watt lamp base case	SCE13LG084.0
LT-37676	0%	8%				8%	8		(2) 48in (1) Instant Start Ballast - High Light Output T8 Linear Fluorescent replacing (4) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-38546	0%	8%				8%	8		(2) 48in (1) Premium Instant Start Ballast - Normal Light Output w/ A/B Switching T8 Linear Fluorescent replacing (2) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-39678	0%	8%				8%	8		(2) U-Tube (1) Instant Start Ballast - Reduced Light Output T8 Linear Flourescent replacing (2) T12 U-Tube Fluorescent	SCE13LG087.0
LT-39875	0%	8%				8%	8		(2) 48in (1) Instant Start Ballast - Normal Light Output T8 Linear Fluorescent replacing (4) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-40596	0%	8%				8%	8		(1) 48in (1) Instant Start Ballast - Normal Light Output T8 Linear Fluorescent replacing (1) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-40696	0%	8%				8%	8		(2) 48in (1) Instant Start Ballast - Normal Light Output w/ Reflectors T8 Linear Flourescent replacing (4) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-41199		8%				8%	8		Up to 64 Watt Interior Fixture T5 Linear Flourescent replacing less than 100 Watt lamp base case	SCE13LG086.0
LT-43018	0%	8%				8%	8		(2) 36in (1) Premium Instant Start Ballast - Reduced Light Output T8 Linear Flourescent replacing (2) 36in T12 Linear Fluorescent	SCE13LG087.0
LT-43532	0%	8%				8%	8		(2) 48in Reduced 28 Watt (1) Programmed Start Ballast - High Light Output T8 Linear Fluorescent replacing (3) 48in T8 Linear Fluorescent	SCE13LG087.0
LT-43895	0%	8%				8%	8		(1) 48in (1) Instant Start Ballast - Reduced Light Output T8 Linear Fluorescent replacing (1) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-44532	0%	8%				8%	8		Up to 750 Watt Exterior Fixture Pulse Start HID replacing greater than 400 Watt lamp base case	SCE13LG084.0
LT-45765	0%	8%				8%	8		36 Watt Interior Fixture (Common Area) CFL replacing Incandescent Average Watts = 124.92	SCE13LG085.2
LT-46109	0%	8%				8%	8		(1) 24in (1) Instant Start Ballast - Normal Light Output T8 Linear Flourescent replacing (1) 24in T12 Linear Fluorescent (per lamp)	SCE13LG087.0
LT-48392	0%	8%				8%	8		(1) 96in (1) Instant Start Ballast - Reduced Light Output T8 Linear Flourescent replacing (2) 96in T12 Linear Fluorescent	SCE13LG087.0
LT-49588	0%	8%				8%	8		(3) 48in (1) Instant Start Ballast - High Light Output T8 Linear Fluorescent replacing (4) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-49683	0%	8%				8%	8		(3) 48in (1) Instant Start Ballast - Normal Light Output w/ A/B Switching T8 Linear Fluorescent replacing (3) 48in T12 Linear Fluorescent	SCE13LG087.0

LT-49810	0%	8%				8%	8		(2) 48in (1) Premium Instant Start Ballast - Reduced Light Output T8 Linear Flourescent replacing (2) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-49843	0%	8%				8%	8		(2) 48in (1) Instant Start Ballast - Normal Light Output T8 Linear Flourescent replacing (3) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-50223	0%	8%				8%	8		Up to 70 Watt Pulse Start HID replacing less than 100 Watt lamp base case	SCE13LG046.1
LT-50379	0%	8%				8%	8		(3) 48in (1) Instant Start Ballast - Normal Light Output T8 Linear Fluorescent replacing (3) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-50587	0%	8%				8%	8		46 Watt Interior Fixture (Common Area) CFL replacing Incandescent Average Watts = 159.62	SCE13LG085.2
LT-50765	0%	8%				8%	8		23 Watt Interior Fixture (Common Area) CFL replacing Incandescent Average Watts = 79.81	SCE13LG085.2
LT-50998	0%	8%				8%	8		(1) 48in (1) Instant Start Ballast - Very High Light Output T8 Linear Fluorescent replacing (2) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-51211	0%	8%				8%	8		Up to 70 Watt Interior Fixture Induction replacing less than or equal to 100 Watt lamp base case	SCE13LG090.0
LT-54329	0%	8%				8%	8		(8) 48in (2) Premium Instant Start Ballast - Reduced Light Output T8 Linear Fluorescent replacing (4) 96in T12 Linear Fluorescent	SCE13LG087.0
LT-54637	0%	8%				8%	8		(2) 24in (1) Instant Start Ballast - Normal Light Output w/ Reflectors T8 Linear Flourescent replacing (2) 24in T12 Linear Fluorescent	SCE13LG087.0
LT-55943		8%				8%	8		245 to 360 Watt (Tier 2) Interior Fixture T5 Linear Flourescent replacing 400 Watt lamp base case	SCE13LG086.0
LT-57486	0%	8%				8%	8		(2) 48in Reduced 28 Watt (1) Programmed Start Ballast - High Light Output T8 Linear Fluorescent replacing (4) 48in T8 Linear Fluorescent	SCE13LG087.0
LT-57486	0%	8%				8%	8		(2) 48in Reduced 28 Watt (1) Programmed Start Ballast - High Light Output T8 Linear Fluorescent replacing (4) 48in T8 Linear Fluorescent	SCE13LG087.0
LT-58109	0%	8%				8%	8		(1) 96in (1) Instant Start Ballast - Reduced Light Output T8 Linear Flourescent replacing (1) 96in T12 Linear Fluorescent (per lamp)	SCE13LG087.0
LT-58832	0%	8%				8%	8		Up to 180 Watt Exterior Fixture Induction replacing 201 - 399 Watt lamp base case	SCE13LG102.0
LT-59103	0%	8%				8%	8		(4) 48in (1) Premium Instant Start Ballast - Reduced Light Output T8 Linear Flourescent replacing (2) 96in T12 Linear Fluorescent	SCE13LG087.0
LT-59482	0%	8%				8%	8		(2) 24in (1) Instant Start Ballast - Normal Light Output T8 Linear Flourescent replacing (2) 24in T12 Linear Fluorescent	SCE13LG087.0
LT-59655	0%	8%				8%	8		(4) 48in Reduced 28 Watt (1) Instant Start Ballast - Reduced Light Output T8 Linear Fluorescent replacing (4) 48in T8 Linear Fluorescent	SCE13LG087.0

LT-59921	0%	8%				8%	8		Up to 125 Watt Exterior Fixture Pulse Start HID replacing 176 - 200 Watt lamp base case	SCE13LG084.0
LT-60092	0%	8%				8%	8		(3) 48in (1) Instant Start Ballast - Normal Light Output T8 Linear Fluorescent replacing (4) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-60432	0%	8%				8%	8		(2) 48in Reduced 28 Watt (1) Instant Start Ballast T8 Linear Fluorescent replacing (2) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-60651	0%	8%				8%	8		Up to 100 Watt Exterior Fixture Induction replacing 101 - 175 Watt lamp base case	SCE13LG102.0
LT-61312	0%	8%				8%	8		(1) 24in (1) Instant Start Ballast - Normal Light Output T5 Linear Flourescent replacing (1) 24in T12 Linear Fluorescent (per lamp)	SCE13LG087.0
LT-63722	0%	8%				8%	8		Up to 70 Watt Exterior Fixture Pulse Start HID replacing less than 100 Watt lamp base case	SCE13LG084.0
LT-65784	0%	8%				8%	8		(2) 48in Reduced 28 Watt (1) Programmed Start Ballast - Normal Light Output T8 Linear Fluorescent replacing (3) 48in T8 Linear Fluorescent	SCE13LG087.0
LT-67100	0%	8%				8%	8		(1) 48in Reduced 25 Watt (1) Instant Start Ballast - Normal Light Output T8 Linear Flourescent replacing (1) 48in T8 Linear Fluorescent (per lamp)	SCE13LG087.0
LT-68384	0%	8%				8%	8		(2) 48in (1) Instant Start Ballast - Normal Light Output w/ Reflectors T8 Linear Flourescent replacing (3) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-68701		8%				8%	8		≤ 15 Watt Down Light (Non Res) LED replacing 40-100 Watts Incandescent Lighting	SCE13LG103.1
LT-69009	0%	8%				8%	8		Up to 360 Watt (Tier 2) Interior Fixture Induction replacing 400 Watt lamp base case	SCE13LG090.0
LT-71214	0%	8%				8%	8		(2) 48in Reduced 28 Watt (1) Instant Start Ballast T8 Linear Fluorescent replacing (3) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-73649	0%	8%				8%	8		30 Watt Interior Fixture (Common Area) CFL replacing Incandescent Average Watts = 104.10	SCE13LG085.2
LT-77822	0%	8%				8%	8		Up to 100 Watt Exterior Fixture Pulse Start HID replacing 101 - 175 Watt lamp base case	SCE13LG084.0
LT-78695	0%	8%				8%	8		Up to 250 Watt Exterior Fixture Induction replacing 400 Watt lamp base case	SCE13LG102.0
LT-78765	0%	8%				8%	8		52 Watt Interior Fixture (Common Area) CFL replacing Incandescent Average Watts = 180.44	SCE13LG085.2
LT-79523	0%	8%				8%	8		39 Watt Interior Fixture (Common Area) CFL replacing Incandescent Average Watts = 135.33	SCE13LG085.2
LT-79584	0%	8%				8%	8		(2) 48in Reduced 28 Watt (1) Programmed Start Ballast - Normal Light Output T8 Linear Fluorescent replacing (4) 48in T8 Linear Fluorescent	SCE13LG087.0
LT-79821	0%	8%				8%	8		(3) 48in (2) Instant Start Ballast - Reduced Light Output T8 Linear Fluorescent replacing (3) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-80108	0%	8%				8%	8		Up to 180 Watt Interior Fixture Induction replacing 176 - 399 Watt lamp base case	SCE13LG090.0

LT-82210	0%	8%				8%	8		(1) 48in (1) Instant Start Ballast - Normal Light Output T8 Linear Flourescent replacing (1) 48in T12 Linear Fluorescent (per lamp)	SCE13LG087.0
LT-83701		8%				8%	8		Up to 128 Watt Interior Fixture CFL replacing 101 - 175 Watt lamp base case	SCE13LG085.2
LT-83912	0%	8%				8%	8		(1) 36in (1) Instant Start Ballast - Reduced Light Output T8 Linear Flourescent replacing (1) 36in T12 Linear Fluorescent	SCE13LG087.0
LT-84012	0%	8%				8%	8		(1) 48in Reduced 28 Watt (1) Instant Start Ballast - Normal Light Output T8 Linear Flourescent replacing (1) 48in T8 Linear Fluorescent (per lamp)	SCE13LG087.0
LT-84901		8%				8%	8		Up to 360 Watt (Tier 2) Interior Fixture CFL replacing greater than 400 Watt lamp base case	SCE13LG085.2
LT-84912		8%				8%	8		Up to 192 Watt Interior Fixture T5 Linear Flourescent replacing 176 - 399 Watt lamp base case	SCE13LG086.0
LT-85932	0%	8%				8%	8		(1) 48in Reduced 28 Watt T8 Linear Fluorescent replacing (1) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-85958	0%	8%				8%	8		(4) 48in (1) Premium Instant Start Ballast - Normal Light Output T8 Linear Flourescent replacing (6) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-87326	0%	8%				8%	8		(2) 48in Reduced 28 Watt (1) Instant Start Ballast - Normal Light Output T8 Linear Flourescent replacing (2) 48in T8 Linear Fluorescent	SCE13LG087.0
LT-87453	0%	8%				8%	8		92 Watt Interior Fixture (Common Area) CFL replacing Incandescent Average Watts = 319.24	SCE13LG085.2
LT-87566		8%				8%	8		250 Watt Pulse Start HID replacing 400 Watt Mercury Vapor	SCE13LG046.1
LT-89122	0%	8%				8%	8		(2) 48in Reduced 28 Watt (1) Instant Start Ballast T8 Linear Fluorescent replacing (4) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-89585	0%	8%				8%	8		(1) 48in (1) NEMA Premium High Efficiency Ballast T8 Linear Flourescent replacing (1) 48in T12 Linear Fluorescent (per lamp)	SCE13LG087.0
LT-89708	0%	8%				8%	8		(1) 48in Reduced 28 Watt (1) Instant Start Ballast - Reduced Light Output T8 Linear Fluorescent replacing (1) 48in T8 Linear Fluorescent	SCE13LG087.0
LT-89782	0%	8%				8%	8		(4) 48in (2) Instant Start Ballast - Reduced Light Output w/ A/B Switching T8 Linear Fluorescent replacing (4) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-89854	0%	8%				8%	8		26 Watt Interior Fixture (Common Area) CFL replacing Incandescent Average Watts = 90.22	SCE13LG085.2
LT-89871	0%	8%				8%	8		(4) 48in (1) Instant Start Ballast - Reduced Light Output T8 Linear Fluorescent replacing (2) 96in T12 Linear Fluorescent	SCE13LG087.0
LT-90075	0%	8%				8%	8		(2) 48in (1) Premium Instant Start Ballast - Normal Light Output T8 Linear Fluorescent replacing (2) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-90144	0%	8%				8%	8		Up to 250 Watt Exterior Fixture Pulse Start HID replacing 400 Watt lamp base case	SCE13LG084.0
LT-90213	0%	8%				8%	8		(2) 24in (1) Instant Start Ballast - Normal Light Output T8 Linear Flourescent replacing (4) 24in T12 Linear Fluorescent	SCE13LG087.0

LT-90213	0%	8%				8%	8		(2) 24in (1) Instant Start Ballast - Normal Light Output T8 Linear Flourescent replacing (4) 24in T12 Linear Fluorescent	SCE13LG087.0
LT-90987	0%	8%				8%	8		54 Watt Interior Fixture (Common Area) CFL replacing Incandescent Average Watts = 187.38	SCE13LG085.2
LT-92448		8%				8%	8		Up to 600 Watt Interior Fixture T5 Linear Flourescent replacing greater than 400 Watt lamp base case	SCE13LG086.0
LT-93432	0%	8%				8%	8		22 Watt Interior Fixture (Common Area) CFL replacing Incandescent Average Watts = 76.34	SCE13LG085.2
LT-93723	0%	8%				8%	8		(2) 48in (1) Instant Start Ballast - High Light Output T8 Linear Fluorescent replacing (3) 48in T12 Linear Fluorescent	SCE13LG087.0
LT-94378	0%	8%				8%	8		(1) 46in (1) Instant Start Ballast - Normal Light Output T5 Linear Flourescent replacing (1) 48in T12 Linear Fluorescent (per lamp)	SCE13LG087.0
LT-97103	0%	8%				8%	8		(1) 48in Reduced Wattage (25W) T8 Linear Flourescent replacing (1) 48in T8 Linear Fluorescent	SCE13LG092.0
LT-98587	0%	8%				8%	8		(2) 48in (2) Premium Instant Start Ballast - Reduced Light Output w/ Reflector T8 Linear Flourescent replacing (4) 48in T8 Linear Fluorescent	SCE13LG087.0
LT-99866	0%	8%				8%	8		(4) 48in (1) Instant Start Ballast - Reduced Light Output T8 Linear Fluorescent replacing (4) 48in T12 Linear Fluorescent	SCE13LG087.0
AP-10114	35%	0%				35%	10		Energy Star Bottom Mount Freezer with through-the-door ice - large (16.5-31 ft3) Refrigerator	SCE13AP001.0
AP-12333	35%	0%				35%	10		620 kWh/yr Energy Star Side Mount Freezer with through-the-door ice - large (23-31 ft3) Refrigerator replacing 821 kWh/yr rated Refrigerator	SCE13AP001.0
AP-19411	35%	0%				35%	10		357 kWh/yr Energy Star Top Mount Freezer - small (10-15 ft3 TV) Refrigerator replacing 621 kWh/yr rated Refrigerator	SCE13AP001.0
AP-19658	35%	0%				35%	10		ES Most Eff 2012 Top Mount Freezer - medium (<18.1 ft3) Refrigerator	SCE13AP001.0
AP-29187	35%	0%				35%	10		Energy Star Top Mount Freezer - compact (7.5 ft3 or less) Refrigerator	SCE13AP001.0
AP-29410	35%	0%				35%	10		399 kWh/yr Energy Star Top Mount Freezer - medium (15-20 ft3) Refrigerator replacing 652 kWh/yr rated Refrigerator	SCE13AP001.0
AP-29677	35%	0%				35%	10		ES Most Eff 2012 Bottom Mount Freezer - Lrg (18.1-22.5 ft3) Refrigerator	SCE13AP001.0
AP-39976	35%	0%				35%	10		ES Most Eff 2012 Bottom Mount Freezer with through-the-door ice - X-Lrg (>22.5 ft3) Refrigerator	SCE13AP001.0
AP-39992	35%	0%				35%	10		447 kWh/yr Energy Star Bottom Mount Freezer - small (8-16.5 ft3) Refrigerator replacing 518 kWh/yr rated Refrigerator	SCE13AP001.0
AP-40945	35%	0%				35%	10		Energy Star with no Freezer (11 - 23 ft3) Refrigerator	SCE13AP001.0
AP-45521	35%	0%				35%	10		452 kWh/yr Energy Star Top Mount Freezer - large (20-25 ft3) Refrigerator replacing 697 kWh/yr rated Refrigerator	SCE13AP001.0
AP-50694	35%	0%				35%	10		ES Most Eff 2012 Side Mount Freezer with through-the-door ice - Lrg (18.1-22.5 ft3) Refrigerator	SCE13AP001.0

AP-59865	35%	0%				35%	10		ES Most Eff 2012 Side Mount Freezer with through-the-door ice - X-Lrg (>22.5 ft3) Refrigerator	SCE13AP001.0
AP-68842	35%	0%				35%	10		487 kWh/yr Energy Star Bottom Mount Freezer - large (16.5-25 ft3) Refrigerator replacing 573 kWh/yr rated Refrigerator	SCE13AP001.0
AP-74421	35%	0%				35%	10		528 kWh/yr Energy Star Side Mount Freezer - medium (15-23 ft3) Refrigerator replacing 703 kWh/yr rated Refrigerator	SCE13AP001.0
AP-75456	35%	0%				35%	10		ES Most Eff 2012 Top Mount Freezer - Lrg (18.1-22.5 ft3) Refrigerator	SCE13AP001.0
AP-80244	35%	0%				35%	10		543 kWh/yr Energy Star Side Mount Freezer with through-the-door ice - medium (15-23 ft3) Refrigerator replacing 835 kWh/yr rated Refrigerator	SCE13AP001.0
AP-82565	35%	0%				35%	10		ES Most Eff 2012 Bottom Mount Freezer - X-Lrg (>22.5 ft3) Refrigerator	SCE13AP001.0
AP-87223	35%	0%				35%	10		Energy Star - compact (7.5 ft3 or less) Refrigerator	SCE13AP001.0
AP-90011	35%	0%				35%	10		Energy Star Bottom Mount Freezer - compact (7.5 ft3 or less) Refrigerator	SCE13AP001.0
AP-98888	35%	0%				35%	10		565 kWh/yr Energy Star Side Mount Freezer - large (23-31ft3) Refrigerator replacing 921 kWh/yr rated Refrigerator	SCE13AP001.0
WH-50970	100%	0%	0%	Cancel		100%	11		EF = 0.93 or Higher 40 Gallons or Larger - High Efficiency Electric Storage Water Heater	SCE13AP002.0
PM-69234			23%			23%	12	For 2015: T20 mandates minimum 70% efficiency for single speed pool pump motors at full-load. Current market pool pump motors have an average efficiency of 66%.		
PM-78394			21%			21%	12	For 2015: T20 mandates minimum 70% and 55% efficiency requirements for dual speed pool pumps at full and half load respectively. Current market pool pumps have an average efficiency of 69% and 50% at full and half loads.		
RF-16543			61%			61%	13			

RF-20986			61%			61%	13			
RF-60192	0%	0%	61%			61%	13		Display Case Cooler Evaporator Fan ECM Motor replacing Shaded Pole Motor	SCE13RN011.0
MT-54002			10%			10%	14			
LT-10556	3%	0%				3%	15		69 Watt Interior Non-Ceiling Fixture CFL replacing Incandescent Average Watts = 239.43	SCE13LG074.0
LT-12101	3%	0%				3%	15		52 Watt Interior Non-Ceiling Fixture CFL replacing Incandescent Average Watts = 180.44	SCE13LG074.0
LT-13849	3%	0%				3%	15		128 Watt Interior Ceiling Fixture CFL replacing Incandescent Average Watts = 444.16	SCE13LG074.0
LT-19143	3%	0%				3%	15		54 Watt Interior Fixture (Dwelling Area) CFL replacing Incandescent Average Watts = 187.38	SCE13LG085.2
LT-19423	3%	0%				3%	15		22 Watt Interior Fixture (Dwelling Area) CFL replacing Incandescent Average Watts = 76.34	SCE13LG085.2
LT-19587	3%	0%				3%	15		26 Watt Interior Ceiling Fixture CFL replacing Incandescent Average Watts = 90.22	SCE13LG074.0
LT-21872	3%	0%				3%	15		72 Watt Interior Non-Ceiling Fixture CFL replacing Incandescent Average Watts = 249.84	SCE13LG074.0
LT-22184	3%	0%				3%	15		13 Watt Interior Ceiling Fixture CFL replacing Incandescent Average Watts = 45.11	SCE13LG074.0
LT-24858	3%	0%				3%	15		22 Watt Interior Ceiling Fixture CFL replacing Incandescent Average Watts = 76.34	SCE13LG074.0
LT-26826	3%	0%				3%	15		32 Watt Interior Ceiling Fixture CFL replacing Incandescent Average Watts = 111.04	SCE13LG074.0
LT-28387	3%	0%				3%	15		54 Watt Interior Ceiling Fixture CFL replacing Incandescent Average Watts = 187.38	SCE13LG074.0
LT-29124	3%	0%				3%	15		26 Watt Interior Non-Ceiling Fixture CFL replacing Incandescent Average Watts = 90.22	SCE13LG074.0
LT-29901	3%	0%				3%	15		26 Watt Interior Fixture (Res LFT) CFL replacing Incandescent Average Watts = 90.22	SCE13LG074.0
LT-34841	3%	0%				3%	15		55 Watt Interior Fixture (Dwelling Area) CFL replacing Incandescent Average Watts = 190.85	SCE13LG085.2
LT-37584	3%	0%				3%	15		27 Watt Interior Ceiling Fixture CFL replacing Incandescent Average Watts = 93.69	SCE13LG074.0
LT-38978	3%	0%				3%	15		64 Watt Interior Fixture (Dwelling Area) CFL replacing Incandescent Average Watts = 222.08	SCE13LG085.2
LT-39075	3%	0%				3%	15		27 Watt Interior Fixture (Dwelling Area) CFL replacing Incandescent Average Watts = 93.69	SCE13LG085.2
LT-49121	3%	0%				3%	15		23 Watt Interior Ceiling Fixture CFL replacing Incandescent Average Watts = 79.81	SCE13LG074.0
LT-49660	3%	0%				3%	15		40 Watt Interior Fixture (Dwelling Area) CFL replacing Incandescent Average Watts = 138.80	SCE13LG085.2
LT-56473	3%	0%				3%	15		69 Watt Interior Fixture (Dwelling Area) CFL replacing Incandescent Average Watts = 239.43	SCE13LG085.2

LT-59842	3%	0%				3%	15		36 Watt Interior Non-Ceiling Fixture CFL replacing Incandescent Average Watts = 124.92	SCE13LG074.0
LT-59876	3%	0%				3%	15		36 Watt Interior Fixture (Dwelling Area) CFL replacing Incandescent Average Watts = 124.92	SCE13LG085.2
LT-60484	3%	0%				3%	15		64 Watt Interior Ceiling Fixture CFL replacing Incandescent Average Watts = 222.08	SCE13LG074.0
LT-64740	3%	0%				3%	15		18 Watt Interior Ceiling Fixture CFL replacing Incandescent Average Watts = 62.46	SCE13LG074.0
LT-67654	3%	0%				3%	15		46 Watt Interior Fixture (Dwelling Area) CFL replacing Incandescent Average Watts = 159.62	SCE13LG085.2
LT-67833	3%	0%				3%	15		39 Watt Interior Ceiling Fixture CFL replacing Incandescent Average Watts = 135.33	SCE13LG074.0
LT-68432	3%	0%				3%	15		23 Watt Interior Fixture (Dwelling Area) CFL replacing Incandescent Average Watts = 79.81	SCE13LG085.2
LT-72883	3%	0%				3%	15		13 Watt Interior Fixture (Res LFT) CFL replacing Incandescent Average Watts = 45.11	SCE13LG074.0
LT-78484	3%	0%				3%	15		64 Watt Interior Non-Ceiling Fixture CFL replacing Incandescent Average Watts = 222.08	SCE13LG074.0
LT-78567	3%	0%				3%	15		72 Watt Interior Fixture (Dwelling Area) CFL replacing Incandescent Average Watts = 249.84	SCE13LG085.2
LT-79344	3%	0%				3%	15		18 Watt Interior Non-Ceiling Fixture CFL replacing Incandescent Average Watts = 62.46	SCE13LG074.0
LT-81657	3%	0%				3%	15		30 Watt Interior Fixture (Dwelling Area) CFL replacing Incandescent Average Watts = 104.10	SCE13LG085.2
LT-85876	3%	0%				3%	15		52 Watt Interior Fixture (Dwelling Area) CFL replacing Incandescent Average Watts = 180.44	SCE13LG085.2
LT-87943	3%	0%				3%	15		39 Watt Interior Fixture (Dwelling Area) CFL replacing Incandescent Average Watts = 135.33	SCE13LG085.2
LT-89934	3%	0%				3%	15		39 Watt Interior Non-Ceiling Fixture CFL replacing Incandescent Average Watts = 135.33	SCE13LG074.0
LT-93842	3%	0%				3%	15		30 Watt Interior Ceiling Fixture CFL replacing Incandescent Average Watts = 104.10	SCE13LG074.0
LT-97876	3%	0%				3%	15		26 Watt Interior Fixture (Dwelling Area) CFL replacing Incandescent Average Watts = 90.22	SCE13LG085.2
LT-18932	0%	8%	60%			68%	8,9		Up to 600 Watt Tier 1 Pulse Start HID replacing greater than 400 Watt lamp base case	SCE13LG046.1
LT-38071	0%	8%	15%			23%	8,9		Up to 125 Watt Pulse Start HID replacing 101 - 175 Watt lamp base case	SCE13LG046.1
LT-48241	0%	8%	60%			68%	8,9		Up to 750 Watt Tier 2 Pulse Start HID replacing greater than 400 Watt lamp base case	SCE13LG046.1
LT-64118	0%	8%	60%			68%	8,9		Up to 250 Watt Pulse Start HID replacing 400 Watt lamp base case	SCE13LG046.1
LT-71883	0%	8%	45%			53%	8,9		Up to 175 Watt Pulse Start HID replacing 176 - 399 Watt lamp base case	SCE13LG046.1

AC-60931	0%	0%				0%		Not explictly triggered by code	Energy Star Room Air Conditioner DX Equipment	SCE13HC001.0
AC-60978	0%	0%				0%		Title 24 2013 - 54,000 btu/h requirement. - However, Title 24 is not triggered if the unit is adding an economizer.	< 65 kBtu/hr Package System Economizer replacing System with no Economizer	SCE13HC046.0
AC-70890	100%	0%		Cancel		100%			12 kBtu/hr Portable Room Air Conditioner DX Equipment	SCE13HC027.0
FS-17337	0%	0%				0%		Title 24 2013 section 140.9 2(b) - Code applies to new hoods and systems with a total exhaust cfm greater than 5,000 cfm. There is a demand ventilation on 75% of the exhaust air, inclusion of controls.	Demand Control Ventilation Hood Control	SCE13CC008.0
LT-10965		0%				0%			> 10 to 30 Watt A-Lamp LED	SCE13LG106.1
LT-12834		0%				0%			Up to 10 Watt A-Lamp LED	SCE13LG106.1
LT-19877		0%				0%			Up to 6 Watt MR16 LED	SCE13LG106.1
LT-21844	0%	0%				0%		0% impact for only lamp changes.	(1) 48in Reduced Wattage (28W) T8 Linear Flourescent replacing (1) 48in T8 Linear Fluorescent	SCE13LG092.0
LT-29434	0%	0%				0%		0% impact for only lamp changes.	Remove (2) 48in. from existing 4 lamp fixture (Indoor Common Area) T8 Linear Fluorescent	SCE13LG095.0
LT-38102		0%				0%			Wall or Ceiling Mounted Lighting Sensor ≥500 Watts Controls	SCE13LG025.1
LT-54654		0%				0%			> 6 to 10 Watt MR16 LED	SCE13LG106.1
LT-58209		0%				0%			Wall Mounted Occupancy Sensor Control	SCE13LG025.1
LT-60979	0%	0%				0%		De-lamp doesn't trigger code	Remove (2) 48in. from existing 4 lamp fixture T8 Linear Flourescent	SCE13LG095.0
LT-65785		0%				0%			Up to 15 Watt PAR30 LED	SCE13LG106.1
LT-80693	0%	0%				0%		Doesn't affect reach in	(1) 60in Retrofits in Medium Temp Reach-in Display Cases LED replacing (1) 60in T8 Linear Fluorescent	SCE13LG098.1
LT-89789		0%				0%			> 15 to 21 Watt PAR30 LED	SCE13LG106.1
LT-90344		0%				0%			Up to 17 Watt PAR38 LED	SCE13LG106.1
LT-92133		0%				0%			> 17 to 25 Watt PAR38 LED	SCE13LG106.1
LT-98724		0%				0%			Wall or Ceiling Mounted Lighting Sensor <500 Watts Control	SCE13LG025.1
PM-21834			0%			0%				
PM-79353						0%				

PM-80597						0%				
PM-98422						0%				
RF-82221	0%	0%				0%				

Work Paper SCE15LG111
Revision 0

Southern California Edison Company

LED High and Low Bay Fixtures

March 10, 2014

AT-A-GLANCE SUMMARY

Applicable Measure Codes:	Refer to Excel Calculation Attachment
Measure Description:	LED High-Bay and Low-Bay Fixtures
Base Case Description:	High-Bay and Low-Bay Pulse-Start Metal Halide or Linear Fluorescent Fixtures
Energy Impact Common Units:	Fixture
Energy Savings :	Refer to Excel Calculation Attachment
Gross Measure Cost ($/unit)	Refer to Excel Calculation Attachment
Measure Incremental Cost ($/unit):	Refer to Excel Calculation Attachment
Effective Useful Life (years):	EUL: 12 years, RUL: 4 years
Measure Application Type:	Early Retirement (ER) and Replace on Burnout (ROB)
Net-to-Gross Ratios:	Downstream and Midstream: 0.7, Direct Install: 0.85
Important Comments:	N/A

DOCUMENT REVISION HISTORY

Workpaper and Revision #	Tech. Revision	MM/DD/YY	Author/Affiliation	Summary of Changes
SCE15LG111 Rev. 0	Based on PGECOLTG178R0	03/10/14	Yun Han/SCE	-New template for 2015 program year.

SECTION 1. GENERAL MEASURE & BASELINE DATA

1.1 MEASURE DESCRIPTION & BACKGROUND

This workpaper details the replacement of Pulse-Start Metal Halide (PSMH) or T8 Linear Fluorescent High Bay and Low Bay fixtures with LED High-Bay and Low-Bay Fixtures. Table 1 lists the measures and their wattage ranges.

Table 1 Measure Names

Solution Code	Measure name
LT-20785	LED High/Low Bay 48 to 131 Watts Replacing 175W PSMH
LT-47551	LED High/Low Bay >131 to 160 Watts Replacing 200W PSMH
LT-99280	LED High/Low Bay >160 to 187 Watts Replacing 250W PSMH
LT-36878	LED High/Low Bay >187 to 220 Watts Replacing 320W PSMH
LT-70713	LED High/Low Bay >220 to 262 Watts Replacing 350W PSMH
LT-28599	LED High/Low Bay >262 to 280 Watts Replacing 400W PSMH
LT-79419	LED High/Low Bay >280 to 320 Watts Replacing 450W PSMH
LT-22805	LED High/Low Bay >320 to 500 Watts Replacing 750W PSMH
LT-68702	LED High/Low Bay >500 to 750 Watts Replacing 1000W PSMH
LT-35334	LED High/Low Bay 40 to 131 Watts Replacing 4-Lamp VHLO 2nd Gen. T8
LT-68154	LED High/Low Bay >131 to 160 Watts Replacing 6-Lamp VHLO 2nd Gen. T8
LT-54307	LED High/Low Bay >160 to 187 Watts Replacing 8-Lamp VHLO 2nd Gen. T8

Products must be listed on Design Lights Consortium's (DLC) qualified product list (QPL) to receive incentives [A]. Self-ballasted screw-based lamps do not qualify.

1.2 TECHNICAL DESCRIPTION

Low-bay fixture mounting heights vary between 8 to 20 feet while a high-bay generally varies from over 20 feet up to 40 feet depending on the system wattage. Title 24 [355] defines the cut-off of high and low bay to be 25 feet. High-bay aisle fixtures are grouped in the same category as the regular high-bay lighting fixture. The spread of the light (zonal lumen density) is the only difference between the two.

Requirements for DLC's LED high-bay and low-bay applications include:

- ≥5,000 lumens
- Min. 80 lm/W
- ≤5,700K CCT
- ≥70 CRI
- 35,000 hr L70
- ≥30%: 20-50° (High and Low-Bay)
- ≥30%: 0-20°, ≥50%: 20-50° (High-Bay Aisle)

1.3 MEASURE APPLICATION TYPE

The delivery methods for the measures in this work paper are:

- Financial Support / Direct Install
- Financial Support / Down-Stream Incentive – Deemed
- Midstream Programs/Midstream Incentive

The program/install type for the above measures is:

- Retrofit (RET) – Direct Install
- Replace on Burn-out (ROB) – Downstream

1.4 Measure and Base Case Cost Effectiveness Data

1.4.1 DEER Measure and Base Case Analysis

Table 2 DEER Difference Summary

DEER Difference Summary Table	
Modified DEER Methodology	No
Scaled DEER Measure	No
DEER Building Prototypes Used	No
Deviation from DEER	DEER does not contain LED Fixtures
DEER Version	N/A
DEER Run ID and Measure Name (Sample)	N/A

Net to Gross

The NTG value was obtained from the "DEER2011_NTGR_2012-05-16.xls" on the DEER website as required by Version 5 of the California Public Utilities Commission (CPUC) Energy Efficiency Policy Manual [351]. The relevant NTGR for this measure is shown in Table 3 below.

Table 3 Net-to-Gross Ratio

NTGR_ID*	Description*	Sector*	BldgType*	ProgDelivID	NTG*
All-Default<=2yrs	All other EEM with no evaluated NTGR; new technology in program for 2 or fewer years	All	Any	All	0.7
Com-Default-HTG-di	All other EEM with no evaluated NTGR; direct install to hard-to-reach only.	Com	Any	DirInstall	0.85
Ind-Default-HTG-di	All other EEM with no evaluated NTGR; direct install to hard-to-reach only.	Ag	Any	DirInstall	0.85
Agricult-Default-HTG-di	All other EEM with no evaluated NTGR; direct install to hard-to-reach only.	Ind	Any	DirInstall	0.85

*Denotes that the column is taken from the DEER NTG Table.

Installation Rate

The installation rate (IR) is identified in the calculation attachment. This value is obtained from the support table available in READi. Currently there is no versioning on the installation rate table. To address appropriate selection of the installation rate, the date of the workpaper will serve as the last date checked for updated IR values. The installation rate varies by end use, sector, technology, application, and delivery method. The relevant IR values for this measure are shown in Table 4 below.

Table 4 Installation Rate

GSIA_ID*	Description*	Sector*	BldgType*	ProgDelivID	GSIAValue*
Def-GSIA	Default GSIA values	Any	Any	Any	1

Spillage Rate

Spillage rate will also be applied to measures however the values will not be tracked in the workpapers. The spillage rate will be tracked in an external table to be supplied to the Energy Division.

READi Technology Fields

To support the development of the ED ex ante tables, select fields from the ex ante database will be identified in the workpaper. For a full set of values associated with the measures in the workpaper refer the Excel calculation template. (In the event that the READi IDs do not support the technology in this workpaper simply indicate “Non-DEER”.)

Table 5 READi Tech IDs

READi Field Name	Values included in this workpaper
Measure Case UseCategory	Lighting
Measure Case UseSubCats	Indoor Lighting
Measure Case TechGroups	Lighting – Hard-wired fixtures
Measure Case TechTypes	LED Fixture
Base Case TechGroups	Lighting – Hard-wired Fixtures
Base Case TechTypes	HID Fixture, Fixture

1.4.2 Codes and Standards Analysis

Title 24 2013 Section 141.0(b)2 contains codes related to Nonresidential lighting as shown below. The measures in this work paper do replace luminaires which triggers Lighting System Alterations. Triggering Alteration requires mandatory control provisions in Section 130.1(a)(b)(c)(d) for each enclosed space that includes Area, Shut-off, Multi-level, and if applicable, Daylighting Controls.

Lighting System Alterations shall meet the applicable requirements in TABLE 141.0-E and the following:

a. Lighting System Alterations include alterations where an existing lighting system is modified, luminaires are replaced, or luminaires are disconnected from the circuit, removed and reinstalled, whether in the same location or installed elsewhere.

EXCEPTION 1 to Section 141.0(b)2Ii: Alterations that qualify as a Luminaire Modification-in-Place.

EXCEPTION 2 to Section 141.0(b)2Iii: Portable luminaires, luminaires affixed to moveable partitions, and lighting excluded in accordance to Section 140.6(a)3.

Luminaire Modifications-in-Place shall meet the applicable requirements in TABLE 141.0-F and the following:

a. To qualify as a Luminaire Modification-in-Place, luminaires shall only be modified by one or more of the following methods:
    1. Replacing lamps and ballasts with like type or quantity in a manner that preserves the original luminaire listing.
    2. Changing the number or type of light source in a luminaire including: socket renewal, removal or relocation of sockets or lampholders, and/or related wiring internal to the luminaire including the addition of safety disconnecting devices.
    3. Changing the optical system of a luminaire in part or in whole.
    4. Replacement of whole luminaires one for one in which the only electrical modification involves disconnecting the existing luminaire and reconnecting the replacement luminaire.
b. Luminaire Modifications-In-Place shall include only alterations to lighting system meeting thefollowing conditions:
    1. Luminaire Modifications-in-Place shall not be part of or the result of any general remodeling or renovation of the enclosed space in which they are located.
    2. Luminaire Modifications-in-Place shall not cause, be the result of, or involve any changes to the panelboard or branch circuit wiring, including line voltage switches, relays, contactors, dimmers and other control devices, providing power to the lighting system.

    EXCEPTION to Section 141.0(b)2Iiii2. Circuit modifications strictly limited to the addition of occupancy or vacancy sensors and class two lighting controls are permitted for Luminaire Modifications-in-Place

Table 6 Code Summary

Code	Applicable Code Reference	Effective Dates
Title 24 (2013)	2013 Non-Residential Compliance manual	July 1, 2014

1.4.3 Non-DEER Study Review

N/A

1.4.4 Measure and Base Case Effective Useful Life

DEER14 update documentation provides EUL and RUL information to be used for the 2015 program cycle extension on www.deeresources.com. The DEER documentation “Summary of EUL-RUL Analysis for the April 2008 Update to DEER” provides the RUL value as a flat 1/3 of the EUL value. The RUL value will only be applied to the first baseline period for retrofit measures that have applicable code that will affect the energy savings. In all other installation types and retrofit with no applicable code that affects the energy savings, the RUL is not applicable to either the first or second baseline period.

Until a study is available, LED fixtures will use 12 years for Non-Residential and 16 years for Residential applications. Table 7 below identifies the value/methodology used for the measures in this work paper.

Table 7 DEER14 EUL Value/Methodology

READi EUL ID	Market	Enduse	Measure	EUL (Years)	RUL (Years)
Non-DEER	Non-DEER	Lighting	LED High/Low Bay	12	4

SECTION 2. ENERGY SAVINGS & DEMAND REDUCTION CALCULATIONS

The fixture performance in the high-bay and low-bay categories of the DLC list was analyzed to justify the wattage equivalency assumptions. The 418 fixtures in these categories were analyzed for equivalency to common base case fixtures.

Rather than compare the fixtures based solely on lumen output, the quantity of lumens in the 20° - 50° zone was also considered. Many Pulse Start Metal Halide HID and linear fluorescent fixtures commonly over-illuminate the area directly beneath the fixture (0° - 20°) simply because they lack the ability to direct light to where it is needed most further from nadir. Pulse Start Metal Halide HID and linear fluorescent sources may achieve a higher average illuminance than an LED source (and have a correspondingly higher lumen output); however they achieve similar minimum illuminance because the LED fixture may be able to do a better job of directing light out to the edges of the illuminated space.

This analysis compares fixtures based on the lumen output in the 20° - 50° range to ignore the hot spot of light that may appear directly under a fixture, and in recognition of the fact that customers are often happy with the light output of LED fixtures with lower light output than the Pulse Start Metal Halide HID or linear fluorescent fixtures replaced.

The lumens in the 20° - 50° range was calculated from the DLC list based on the measured light output of each fixture multiplied by the % of lumens in that range, labeled on the DLC spreadsheet at ZL-HBLB: 20-50 or ZL-HBA: 20-50. The lumen output for base case fixtures in the 20° - 50° range was calculated from the zonal lumen summary tables of manufacturer photometric reports. These values were corrected for lamp lumens and ballast factor based on industry standards for Pulse-Start Metal Halide Lamps and F32T8 2nd generation linear fluorescent lamps.

The LED products equivalent in lumen output in the 20° - 50° range to the base case fixtures were grouped as well as possible, given the limitation of varying LED fixture performance. The base cases for Pulse Start Metal Halide HID and 2nd generation linear fluorescent fixtures were compared separately to the group of DLC-approved fixtures that would best replace them based on photopic lumens in the 20° - 50° zones. Measure codes were created by setting maximum and minimum wattage and minimum fixture lumen output values. Product eligibility will be determined by comparing products to those 3 values as found in the DLC list.

The base case wattages were determined based on the 12 most common high-bay and low-bay fixture configurations which include PSMH and 2nd Gen. T8 VHLO LF lamps. The system Watts are from the Standard Fixture Wattages table [297].

The LED range was created based on lumen equivalence in the 20°-50° zone of the baseline. The measure wattage was determined by using the largest value within the wattage range of each measure.

Table 8 Measure Names

Solution Code	Measure name	Fixture Code	Base System Watts	Minimum Fixture Lumens	LED Watts
LT-20785	LED High/Low Bay 48 to 131 Watts Replacing 175W PSMH	MH175PS/1	0.208	6,200	0.131
LT-47551	LED High/Low Bay >131 to 160 Watts Replacing 200W PSMH	MH200PS/1	0.232	9,600	0.160
LT-99280	LED High/Low Bay >160 to 187 Watts Replacing 250W PSMH	MH250PS/1	0.288	11,200	0.187
LT-36878	LED High/Low Bay >187 to 220 Watts Replacing 320W PSMH	MH320PS/1	0.365	12,900	0.220
LT-70713	LED High/Low Bay >220 to 262 Watts Replacing 350W PSMH	MH350PS/1	0.400	15,800	0.262
LT-28599	LED High/Low Bay >262 to 280 Watts Replacing 400W PSMH	MH400PS/1	0.456	21,600	0.280
LT-79419	LED High/Low Bay >280 to 320 Watts Replacing 450W PSMH	MH450PS/1	0.506	23,900	0.320
LT-22805	LED High/Low Bay >320 to 500 Watts Replacing 750W PSMH	MH750PS/1	0.818	32,300	0.500
LT-68702	LED High/Low Bay >500 to 750 Watts Replacing 1000W PSMH	MH1000PS/1	1.080	43,400	0.750
LT-35334	LED High/Low Bay 40 to 131 Watts* Replacing 4-Lamp VHLO 2nd Gen. T8	F44ILL/2-V	0.152	6,200	0.131
LT-68154	LED High/Low Bay >131 to 160 Watts Replacing 6-Lamp VHLO 2nd Gen. T8	F46ILL/2-V	0.226	9,600	0.160
LT-54307	LED High/Low Bay >160 to 187 Watts* Replacing 8-Lamp VHLO 2nd Gen. T8	F44ILL/2-V x 2	0.304	11,200	0.187

*SCE wattages vary slightly relative to the PGE wattages in PGECOLTG178 R0 for LED High/Low Bay 40 to 131 Watts Replacing 4-Lamp VHLO 2nd Gen. T8 and LED High/Low Bay >160 to 187 Watts Replacing 8-Lamp VHLO 2nd Gen. T8

2.1 Energy Savings Estimation Methodologies

The following is a sample energy savings calculation of RET 1st baseline for LED High/Low Bay 48 to 131 Watts replacing 175W PSMH in an Assembly building type in Climate Zone 6. The base wattage uses pre-existing operating hours and the measure wattage uses occupancy sensor building hours due to the Title 24 occupancy sensor requirement.

$$EnergySavings\left[\frac{kWh}{Unit \times Year}\right] = \frac{\left(\frac{\Delta Watts}{Lamp}\right) \times \left(Annual\ Hours\right) \times \left(Interactive\ Effects\right)}{1{,}000\left(\frac{Watt\ hours}{kWh}\right)}$$

$$EnergySavings\left[\frac{kWh}{Unit \times Year}\right] = \frac{[(208) \times (2609.6) \times 1.126] - [(131) \times (2531.5) \times 1.126]}{1{,}000\left(\frac{Watthours}{kWh}\right)}$$

$$EnergySavings\left[\frac{kWh}{Unit \times Year}\right] = 237.78$$

The following is a sample energy savings calculation of RET 2nd baseline and ROB 1st baseline for LED High/Low Bay 48 to 131 Watts replacing 175W PSMH in an Assembly building type in Climate Zone 6. This calculation uses the occupancy sensor hours for the chosen building type to calculate the energy savings due to Title 24 code.

$$EnergySavings\left[\frac{kWh}{Unit \times Year}\right] = \frac{(208-131)\times(2531.5)\times 1.126}{1{,}000\left(\frac{Watthours}{kWh}\right)}$$

$$EnergySavings\left[\frac{kWh}{Unit \times Year}\right] = 219.49$$

2.2 Demand Reduction Estimation Methodologies

The following is a sample demand reduction calculation of RET 1st baseline for LED High/Low Bay 48 to 131 Watts replacing 175W PSMH in an Assembly building type in Climate Zone 6.

$$Demand\,\mathrm{Re}duction\left[\frac{kW}{Unit}\right] = \frac{\left(\frac{\Delta Watts}{Unit}\right)\times\left(PeakCoincidenceFactor\right)\times\left(InteractiveEffects\right)}{1000\frac{W}{kW}}$$

$$DemandReduction\left[\frac{kW}{Unit}\right] = \frac{[(208)\times(0.53187)\times 1.2389]-[(131)\times(0.51911)\times 1.2389]}{1{,}000\left(\frac{Watthours}{kWh}\right)}$$

$$DemandReduction\left[\frac{kW}{Unit}\right] = 0.05281$$

The following is a sample demand reduction calculation of RET 2nd baseline and ROB 1st baseline for LED High/Low Bay 48 to 131 Watts replacing 175W PSMH in an Assembly building type in Climate Zone 6. This calculation uses the occupancy sensor coincident diversity factor for the chosen building type to calculate the energy savings due to code.

$$DemandReduction\left[\frac{kW}{Unit}\right] = \frac{(208-131)\times(0.51911)\times 1.2389}{1{,}000\left(\frac{Watthours}{kWh}\right)}$$

$$DemandReduction\left[\frac{kW}{Unit}\right] = 0.04952$$

Savings for other measures in different building types and climate zones can be found in the attachment [B].

Section 3. Load Shapes

The difference between the base case load shape and the measure load shape would be the most appropriate load shape; however, only end-use profiles are available. Therefore, the closest load shape chosen for this measure is the DEER:Indoor_Non-CFL_Ltg load shape. See Table 9 for a list of all Building Types and Load Shapes. See the KEMA report [31] for a more thorough discussion regarding the load shapes for this measure.

Table 9 Building Types and Load Shapes

Building Type	E3 Alt. Building Type	Load Shape
Agricultural	NON_RES	DEER:Indoor_Non-CFL_Ltg
Assembly	NON_RES	DEER:Indoor_Non-CFL_Ltg
Education - Primary School	NON_RES	DEER:Indoor_Non-CFL_Ltg
Education - Secondary School	NON_RES	DEER:Indoor_Non-CFL_Ltg
Education - Relocatable Classroom	NON_RES	DEER:Indoor_Non-CFL_Ltg
Education - Community College	NON_RES	DEER:Indoor_Non-CFL_Ltg
Education - University	NON_RES	DEER:Indoor_Non-CFL_Ltg
Grocery	NON_RES	DEER:Indoor_Non-CFL_Ltg
Food Store	NON_RES	DEER:Indoor_Non-CFL_Ltg
Health/Medical - Hospital	NON_RES	DEER:Indoor_Non-CFL_Ltg
Health/Medical - Nursing Home	NON_RES	DEER:Indoor_Non-CFL_Ltg
Health/Medical - Clinic	NON_RES	DEER:Indoor_Non-CFL_Ltg
Lodging - Hotel	NON_RES	DEER:Indoor_Non-CFL_Ltg
Lodging - Guest Rooms	NON_RES	DEER:Indoor_Non-CFL_Ltg
Lodging - Motel	NON_RES	DEER:Indoor_Non-CFL_Ltg
Manufacturing - Bio/Tech	NON_RES	DEER:Indoor_Non-CFL_Ltg
Manufacturing - Light Industrial	NON_RES	DEER:Indoor_Non-CFL_Ltg
Industrial	NON_RES	DEER:Indoor_Non-CFL_Ltg
Misc - Commercial	NON_RES	DEER:Indoor_Non-CFL_Ltg
Office - Large	NON_RES	DEER:Indoor_Non-CFL_Ltg
Office - Small	NON_RES	DEER:Indoor_Non-CFL_Ltg
Restaurant - Fast-Food	NON_RES	DEER:Indoor_Non-CFL_Ltg
Restaurant - Sit-Down	NON_RES	DEER:Indoor_Non-CFL_Ltg
Retail - Multistory Large	NON_RES	DEER:Indoor_Non-CFL_Ltg
Retail - Single-Story Large	NON_RES	DEER:Indoor_Non-CFL_Ltg
Retail - Small	NON_RES	DEER:Indoor_Non-CFL_Ltg
Storage - Conditioned	NON_RES	DEER:Indoor_Non-CFL_Ltg
Storage - Unconditioned	NON_RES	DEER:Indoor_Non-CFL_Ltg
Transportation - Communication - Utilities	NON_RES	DEER:Indoor_Non-CFL_Ltg
Warehouse - Refrigerated	NON_RES	DEER:Indoor_Non-CFL_Ltg

SECTION 4. BASE CASE & MEASURE COSTS

Costs with climate zone multipliers can be found in the attachment [B].

4.1 BASE CASE COST

The base case costs are taken from the DOE Metal Halide Fixture Standard NOPR [C] which are based on the manufacturer's selling price with a 43% supply chain markup and from RS Means 2013 for Linear Fluorescent fixtures and labor [D].

Table 10 Base Cost

Solution Code	Measure name	Base Cost	Labor Cost	Total Cost
LT-20785	LED High/Low Bay 48 to 131 Watts Replacing 175W PSMH	199.17	200.03	399.20
LT-47551	LED High/Low Bay >131 to 160 Watts Replacing 200W PSMH	254.27	200.03	454.30
LT-99280	LED High/Low Bay >160 to 187 Watts Replacing 250W PSMH	281.83	213.04	494.87
LT-36878	LED High/Low Bay >187 to 220 Watts Replacing 320W PSMH	326.39	213.04	539.43
LT-70713	LED High/Low Bay >220 to 262 Watts Replacing 350W PSMH	382.09	213.04	595.13
LT-28599	LED High/Low Bay >262 to 280 Watts Replacing 400W PSMH	426.65	235.80	662.45
LT-79419	LED High/Low Bay >280 to 320 Watts Replacing 450W PSMH	432.98	235.80	668.78
LT-22805	LED High/Low Bay >320 to 500 Watts Replacing 750W PSMH	456.99	235.80	692.79
LT-68702	LED High/Low Bay >500 to 750 Watts Replacing 1000W PSMH	503.91	235.80	739.71
LT-35334	LED High/Low Bay 40 to 131 Watts Replacing 4-Lamp VHLO 2nd Gen. T8	150.93	152.87	303.80
LT-68154	LED High/Low Bay >131 to 160 Watts Replacing 6-Lamp VHLO 2nd Gen. T8	188.66	152.87	341.53
LT-54307	LED High/Low Bay >160 to 187 Watts Replacing 8-Lamp VHLO 2nd Gen. T8	226.39	152.87	379.26

4.2 Measure Case Cost

The measure equipment costs were developed from current LED fixture quotations from California lighting manufacturer representatives and websites. The same base labor cost is used for the measure labor cost.

Table 11 Measure Cost

Solution Code	Measure name	Measure Cost	Labor Cost	Total Cost
LT-20785	LED High/Low Bay 48 to 131 Watts Replacing 175W PSMH	376.16	200.03	576.19
LT-47551	LED High/Low Bay >131 to 160 Watts Replacing 200W PSMH	445.77	200.03	645.80
LT-99280	LED High/Low Bay >160 to 187 Watts Replacing 250W PSMH	580.18	213.04	793.22
LT-36878	LED High/Low Bay >187 to 220 Watts Replacing 320W PSMH	649.03	213.04	862.07
LT-70713	LED High/Low Bay >220 to 262 Watts Replacing 350W PSMH	685.02	213.04	898.06
LT-28599	LED High/Low Bay >262 to 280 Watts Replacing 400W PSMH	713.82	235.80	949.62

LT-79419	LED High/Low Bay >280 to 320 Watts Replacing 450W PSMH	823.06	235.80	1058.86
LT-22805	LED High/Low Bay >320 to 500 Watts Replacing 750W PSMH	1237.45	235.80	1473.25
LT-68702	LED High/Low Bay >500 to 750 Watts Replacing 1000W PSMH	1645.54	235.80	1881.34
LT-35334	LED High/Low Bay 40 to 131 Watts Replacing 4-Lamp VHLO 2nd Gen. T8	376.16	152.87	529.03
LT-68154	LED High/Low Bay >131 to 160 Watts Replacing 6-Lamp VHLO 2nd Gen. T8	445.77	152.87	598.64
LT-54307	LED High/Low Bay >160 to 187 Watts Replacing 8-Lamp VHLO 2nd Gen. T8	614.61	152.87	767.48

4.3 Gross and Incremental Measure Cost

4.3.1 Gross Measure Cost

The gross measure cost (GMC) for RET 1st baseline is represented by the equation below:

GMC = Measure Equipment Cost + Measure Labor Cost

GMC for RET is the same as the measure case cost as shown in Table 11.

For ROB 1st baseline and RET 2nd baseline, GMC is represented by the equation below and shown in Table 12.

GMC = Measure Equipment Cost – Base Case Equipment Cost

Table 12 Gross Measure Cost

Solution Code	Measure name	Base Cost	Measure Cost	GMC
LT-20785	LED High/Low Bay 48 to 131 Watts Replacing 175W PSMH	199.17	376.16	176.99
LT-47551	LED High/Low Bay >131 to 160 Watts Replacing 200W PSMH	254.27	445.77	191.50
LT-99280	LED High/Low Bay >160 to 187 Watts Replacing 250W PSMH	281.83	580.18	298.35
LT-36878	LED High/Low Bay >187 to 220 Watts Replacing 320W PSMH	326.39	649.03	322.64
LT-70713	LED High/Low Bay >220 to 262 Watts Replacing 350W PSMH	382.09	685.02	302.93
LT-28599	LED High/Low Bay >262 to 280 Watts Replacing 400W PSMH	426.65	713.82	287.17
LT-79419	LED High/Low Bay >280 to 320 Watts Replacing 450W PSMH	432.98	823.06	390.08
LT-22805	LED High/Low Bay >320 to 500 Watts Replacing 750W PSMH	456.99	1237.45	780.46
LT-68702	LED High/Low Bay >500 to 750 Watts	503.91	1645.54	1141.63

	Replacing 1000W PSMH			
LT-35334	LED High/Low Bay 40 to 131 Watts Replacing 4-Lamp VHLO 2nd Gen. T8	150.93	376.16	225.23
LT-68154	LED High/Low Bay >131 to 160 Watts Replacing 6-Lamp VHLO 2nd Gen. T8	188.66	445.77	257.11
LT-54307	LED High/Low Bay >160 to 187 Watts Replacing 8-Lamp VHLO 2nd Gen. T8	226.39	614.61	388.22

4.3.2 Incremental Measure Cost

The Incremental Measure Cost is the same as Gross Measure Cost as shown in Section 4.3.1.

ATTACHMENTS

1. SCE15LG111.0 - Calculation Template

APPENDIX A – SCE/ED APPLICATION TYPES

SCE Program Type	ED Application Type	1st Baseline Savings	2nd Baseline Savings	1st Baseline Cost	2nd Baseline Cost	1st Baseline Life	2nd Baseline Life
New	New Construction (Nc)	Above Code/Standard	N/A	Incremental Cost	N/A	EUL	0
Replace on Burnout (ROB)	Replace on Burnout (Rob)/Normal Replacement (NR)	Above Code/Standard	N/A	Incremental Cost	N/A	EUL	0
Retrofit (RET)	Early Replacement (ER)	Above Cust. Existing	Above Code/Standard	Full Cost	Incremental Cost	RUL	EUL-RUL
Retrofit – First Baseline Only (REF)	Early Replacement RUL (ErRul)	Above Cust. Existing	N/A	Full Cost	N/A	EUL	0
Retrofit Add-on (REA)	N/A	Above Cust. Existing	N/A	Full Cost	N/A	EUL	0

REFERENCES

Reference List
2014-01-21

[31]
[297]
[351]
[355]

A http://www.designlights.org/

B Attachment 1 – Calculation Template 2015 v2.xlsm

C Notice Of Proposed Rulemaking Technical Support Document: Energy Efficiency Program For Consumer Products And Certain Commercial And Industrial Equipment: Metal Halide Lamp Fixtures. DOE. August 2013. Page 13-17 (301).

D RS Means Online Estimating, 2013, California data. Accessed at http://rsmeansonline.com/SearchData

Appendix F

2015 Federal Government and Military IDSM Partnership Program Implementation Plan

1. **Program Name: Federal Government & Military Integrated Demand Side Management Partnership**

   Program Type: Core

2. **Projected Program Budget Table, 2015**

Total Administrative Cost	Total Marketing & Outreach Cost	Total Direct Implementation Cost	Total Integration Budget Allocated to other programs (if applicable)	Total Budget
$330,000	$140,846	$1,608,765	-	$2,079,611

3. **Projected Program Gross Impacts Table, 2015**

2015 Gross kWh Savings	2015 Gross kW Savings
5,000,000	600

4. **Program Description**

a) <u>Describe Program</u>

<u>Background</u>

Federal government accounts are one of the largest bundled or direct access customer groups in SCE's service territory, in aggregate consuming approximately 753 GWh per year with an estimated maximum demand of 171 MW per year. The federal government and its military sector, including military and civilian agencies such as naval air bases and veteran administration hospitals are also important to California as a critical service agency employing many support industries and employees in the region.

Federal facilities are also required to meet energy efficiency and related goals. For example, the Energy Independence and Security Act (EISA) of 2007 mandates that federal facilities reduce total building energy usage 30% by 2015, and reduce 100% of building fossil fuel usage.[1] Executive Order 13514, signed in 2009, also establishes corresponding tiered greenhouse gas (GHG) emissions reduction and management

[1] Fiscal year 2003 building baseline.

requirements for federal agencies. Federal facility managers must meet these aggressive goals while managing other competing interests such as tightening budget constraints, inconsistent funding streams, and shifting security objectives.

During the 2013-2014 program cycle, SCE leveraged demand response funding to develop a collaboration with federal government facilities by providing IDSM education and outreach during events such as Earth Day fairs. In 2013, SCE also conducted IDSM audits of over 100 federal government buildings that identified substantial, uncaptured savings potential of over seven MWh and nearly one MW in federal facilities within SCE territory.

2015 Program Overview

SCE proposes to leverage the work initiated with federal and military customers in 2013-2014 to develop a focused partnership with dedicated incentives, deeper technical assistance, and professional services. The primary goals of the partnership are to:

- Identify and implement EE opportunities across all types of federal and military facilities, including military living quarters (barracks); and

- Encourage and coordinate federal facility participation in other DSM programs such as distributed generation (DG), demand response (DR) and Energy Storage (ES).

The Partnership will also support grid reliability needs in the area affected by the decommissioning of the San Onofre Nuclear Generation Station (SONGS) through the use of EE, DR, DG, and ES measures.

The Partnership will be administered by a Partnership management team, including representatives from the federal government and Southern California Edison. The team will meet on a monthly basis and will set overall program policy and ensure that the program adheres to the plan.

The Partnership will coordinate with other EE programs, such as EE retrofit programs, RCx programs, and other DSM programs, as described below, to deliver customized packages of offerings to federal customers.

2015 Program Details

The 2015 Partnership will include the following facilities:

- Naval Base Ventura County;
- Edwards Air force Base;
- Naval Air Station China Lake;
- Fort Irwin;
- Marine Corp Logistics Base Barstow;

- Marine Base Twenty-Nine Palms;
- Naval Station Corona;
- Naval Base Seal Beach
- Los Angeles Air Force Base;
- Veterans Administration Hospitals; and
- Other facilities, as identified.

The Partnership will include the following elements:

Benchmarking

The identification of potential projects begins with a benchmarking effort. Low-scoring facilities may be candidates for retro-commissioning or retrofit projects that may include major equipment replacement depending on the score achieved. Once a retro-commissioning or a retrofit project maximizes a building's energy efficiency, it is benchmarked again during the measurement and verification (M&V) process. Benchmarking provides the information that Federal facilities and SCE will need to document savings from the Partnership.

Retro-Commissioning

The Partnership will implement retro-commissioning projects in federal facilities where feasible. These projects provide an opportunity to demonstrate a cost-effective approach to optimizing facility operations, saving both electric and gas energy, while reducing operating costs and improving occupancy comfort. RCx activities may include, but are not limited to:

- Selection of candidate buildings for RCx based on results of benchmarking effort and participation in SCE retro-commissioning program;
- Development of an RCx plan for each candidate building;
- Investigation of opportunities through energy audits and technical assessments of major building systems (lighting, HVAC, etc.);
- Performance of pre-functional tests of building systems;
- Identification and implementation of solutions for minor no-cost/low-cost deficiencies;
- Recommendations for capital improvement measures for future planning that may further improve system operation;
- Utilization of eQuest or other modeling/simulation software to model building operations and determine scenarios for optimum performance;
- Execution of functional performance tests to ensure proper operation of the optimized systems;
- Development of a training manual and monitoring capabilities (if applicable) to ensure persistence of energy savings; and

- Creation of a plan to comply with future benchmarking and RCx activities.

Retrofit and Modernization

The Partnership will work with the federal government to identify facilities and develop a pool of retrofit projects for implementation. The number and scope of the projects is contingent on the availability of funds; the Partnership will maintain a list of prioritized projects as funding is available. During the retrofit process, department staff will also acquire the experience and knowledge to identify and implement retrofit projects so that they can undertake EE projects independently. While retrofit projects will be unique for each facility, a sample list of expected measures is provided in section 4b below. The Partnership will also investigate opportunities to include EE measures in all major new construction and renovation projects, special repair projects, and standard scheduled maintenance operations.

Integration with Demand Response (DR) and Other DSM Services

The Partnership will educate customers on DSM opportunities outside of EE, and will coordinate with the program directly to simplify participation. For example, the Partnership will include DR participation. DR programs provide tariff-based benefits to customers who design and utilize demand response procedures. The Partnership will look for opportunities to integrate demand response and other DSM services into the Partnership.

The Partnership will also assist facility and operations managers who are interested in solar technology. In alignment with California Energy Action Plan's loading order, SCE technical support staff can utilize energy audits to provide recommendations to improve facility operations through IDSM measures prior to implementing more costly solar technologies.

Other forms of DSM, such as energy storage, will also be encouraged and considered.

Education, Outreach, and Training

The success of this Partnership is contingent on the ability of the Partnership management team to communicate to federal government agencies the benefits and availability of EE projects. The Partnership will focus on increasing upper management's awareness and decision makers' support for EE projects and will leverage SCE and other available training programs. Education and training activities may include workshops for federal government facility managers and other decision makers, including training on best practices for the implementation of EE retrofit projects, building operations, and new technologies that may be applicable to the effective completion of their daily tasks. Participants will have opportunities to explore the programs that are currently available from SCE. Additionally, this Partnership provides opportunities for participants to share best practices with other facility managers.

Workshops will be coordinated and delivered in conjunction with other SCE offerings, efforts, such as SCE's Energy Education Center. The team also utilizes training programs available from state and federal agencies such as the California Energy

Commission and the Energy Information Administration to deliver various technical training courses to improve the skills and knowledge of federal facility staff.

Below is a description of key education, outreach and training activities.

Key Activity	Description
Outreach	The Partnership management team begins outreach efforts by contacting the heads of facilities management for each facility, informing them of the availability of funds for approved measures and activities in federal government facilities. The team schedules meetings to discuss options, implementation criteria, benefits of Partnership participation, and program offerings. The team participates in onsite energy events such Earth Day and October Energy Awareness.
Customer Follow-Up	The Partnership management team, in coordination with staff from the federal government and the SCE, visit each targeted facility to talk with facilities managers about the various options and proposed energy efficiency measures. After confirming an appropriate facility for implementing measures and/or retro-commissioning, the management team meets the appropriate facilities managers to present the anticipated energy savings, other benefits, and considerations associated with the implementation.
Implementation and Training	The Partnership management team share IDSM knowledge and implementation experience with federal government entities through a series of meetings and workshops. These meetings and workshops are coordinated with other Partnership programs.

Funding Sources

SCE will work with its internal program staff to allocate appropriate incentive amounts from all applicable programs and to ensure that federal facilities include complete and correct incentive information for submitting when they arrange for financing. Partnerships offerings may include:

- Enhanced partnership incentives, which offer increased incentives as compared with standard EE program offerings;
- Performance contracting with Energy Service Companies (ESCOs);
- SCE's Utility Energy Service Contracts (UESC). UESC is funded outside of EE, and provides financing for federal agencies for EE projects.[2]
- Turn-key third-party program offerings such as DR aggregators; and

[2] Under 42 U.S.C. 8256, Federal agencies are authorized and encouraged to participate in energy-efficiency, water-conservation, and electricity-demand programs offered by gas, water, or electric utilities. Section 432 of 42 U.S.C. 8253 authorizes agencies to combine appropriations and financing.

- EE Financing options, such as SCE's On-Bill Financing Program.

Major Activities:

Major Partnership activities are detailed below:

Key Activity	Description
Identify key stakeholders to participate	The partnership management team identifies key stakeholders in each facility. They may be selected to participate in the project team.
Conduct solicitation for potential projects from participating federal government facilities	The retrofit project team coordinates with the customer to generate a pool of projects to be evaluated.
Compile and evaluate projects based on project criteria and cost effectiveness requirements	The retrofit project team performs due diligence on proposed projects to determine if each project meets the criteria and cost-effectiveness requirements. The project team provides a list of recommended projects.
Approve projects for funding	The Partnership management team reviews project team recommendations for potential projects.
Identify funding sources	The Partnership team and participating federal government facilities explore financing alternatives such as rebates and incentives, on-bill financing, application of existing budget and financing to maximize the federal government's investment in IDSM.
Coordinate project implementation with partners and contractors	The project team provides oversight of project implementation and coordinates with customer and contractors to ensure successful and timely implementation.
Verify project installation and provide incentive payments	The project team conducts 100% of inspection. Upon verification, project team approves the completed projects for incentive payments.

Key Activity	Description
Compile project results and complete final report	The project team compiles all relevant project information including measure information, energy savings, program incentives paid, etc.
Coordinate with EM&V contractor, where applicable	If required, management team coordinates with the project teams and key stakeholders to support any requests from the CPUC approved EM&V contractors.

Non-Resource Activities

The following is a list of services that will integrate all IDSM opportunities and that may be offered through the Partnership, where applicable:

- Audit services;
- Technical assistance;
- Training and education;
- Design assistance;
- Due diligence project review;
- Outreach activities such as April Earth Day and October Energy Awareness, and
- On Bill Financing.

Subcontractor Activities

The Partnership relies on contractors to carry out portions of the program. Subcontractor activities may include but are not limited to:

- Program planning and design assistance in areas like narrative preparation for filings, preparing project energy savings estimates and E3 cost-effectiveness calculators, and providing assistance in the development of marketing and outreach plans;
- Coordinating, scheduling, and documenting results and action items from Partnership team meetings;
- Preparing and conducting formal presentations and participating in conferences as required by the management team;
- Maintaining a project tracking and reporting database system;
- Assisting SCE and the federal government in reporting and regulatory communications;

- Assisting in the development of workshop agendas and materials, identification of experts, facilitation of workshops and training sessions, and the preparation of minutes for training and education components;
- Implementation of assistance services such as construction management or where applicable, direct install for targeted measures; and
- Miscellaneous professional and technical assistance as requested by SCE to assist the federal government in identifying, implementing, and maintaining energy efficient measures.

Retro-commissioning and Retrofit Contractors

The Partnership provides access to an established pool of retro-commissioning contractors that meet criteria regarding their capabilities, company longevity, and solvency. The RCx and retrofit program elements operate on an integrated basis, providing immediate energy savings and setting the foundation for a long-term program that focuses on the sustainability and best practices. Subcontractors are used to assist in Partnership administration and management, and in the application of the program elements.

Quality Assurance and Evaluation Activities

SCE proposes to work with the Energy Division to develop and submit a comprehensive EM&V Plan after the Partnership implementation plans is filed. This will include process evaluations and other program-specific studies within the context of broader utility and Energy Division studies. More detailed plans for process evaluation and other program-specific evaluation efforts cannot be developed until after the final program design is approved by the CPUC. In many cases, after program implementation has begun, plans need to be based on identified program design and implementation issues.

The Partnership management team will establish and oversee quality assurance measures for the Partnership programs including oversight and verification of subcontractor activities. These procedures and the associated reporting are developed in detail during the program implementation process. Project teams provide the level of due diligence and quality assurance that are consistent with current partnership and utility programs. Test samples will include a representative percentage of pre- and post-installation confirmation assignments.

b) List Measures

The following is a sample list of measures that would be considered through the Partnership:

Measure Name	Estimated Customer Rebate ($/unit)
Customized - Indoor Lighting	Standard SCE rebate + $0.03 to $0.06/kWh
Customized - Indoor Lighting Controls & EMS	
Customized - Outdoor Lighting	
Customized - Outdoor Lighting Controls	
Customized - Motors	
Customized - VFDs	
Customized - HVAC EMS	
Customized - Chillers	
Customized - HVAC	
RCx/MBCx	
Deemed Incentives	
Overall Building Performance	
System Approach - Light Power Density	
System Approach - Chillers	
System Approach - Daylighting	
System Approach - HVAC Energy Reduction	
Additional building measures that include window film, exhaust hoods, door and window piping, aerators, gallons per flush, gallons per minute, and structural insulation	
Residential measures for on-base military housing that include window film, indoor and outdoor lighting and controls, HVAC, structural insulation	
Commercial measures for on-base commissaries that include window film, refrigeration, lighting, HVAC, structural insulation	

c) <u>List Non-Incentive Customer Services</u>

See Nonresource Activities above.

5. Program Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

See Section 5 of the Institutional and Government Core PIP.

b) Market Transformation Information

See Section 5 of the Institutional and Government Core PIP.

c) Program Design to Overcome Barriers

The partnership will address the following barriers:

- Barrier: Project Implementation Mechanism

  The Federal Government's departments and systems are large, complex organizations serving a broad range of stakeholders, with diverse geographic and operational needs, which complicates the process of completing EE retrofits and requires customized solutions.

  Solution: The Partnership is designed to assess and respond to each facilities' specific needs and will provide experienced resources to develop and implement projects. Examples of support include form preparation and submittal, and project reviews and walkthroughs with the customer.

- Barrier: Funding Constraints

  The Federal government is faced with a challenge to meet mandates to reduce energy consumption while budgets are constrained or reduced.

  Solution: The Partnership will offer a combination of the following to address financial constraints:

  - Enhanced partnership incentives (see measure table above), which offer increased incentives as compared with standard EE program offerings;
  - Performance contracting with Energy Service Companies (ESCOs);
  - SCE's Utility Energy Service Contracts (UESC). UESC is funded outside of EE, and provides financing for federal agencies for EE projects.[3]

[3] Under 42 U.S.C. 8256, Federal agencies are authorized and encouraged to participate in energy-efficiency, water-conservation, and electricity-demand programs offered by gas, water, or electric utilities. Section 432 of 42 U.S.C. 8253 authorizes agencies to combine appropriations and financing.

- Turn-key third-party program offerings such as DR aggregators; and
- EE Financing options, such as SCE's On-Bill Financing Program.

- Barrier: Lack of Information
  Federal facility managers often to not have adequate information on the EE opportunities in their buildings to take action.

  Solution: The Partnership will conduct IDSM audits and identify specific measures for implementation to support well informed project proposals

- Barrier: Inability to apply incentives to internal energy project budgets

  Solution: The Partnership will evaluate supporting authorization for federal government facilities to keep incentives that can be repurposed into new energy projects. Solutions may include electricity bill credits and buying down the cost of contracted projects.

d) Quantitative Program Targets

Federal Government Partnership	
	Program Target by 12/31/15
Total kWh and kW	See Table 3
IDSM Audits	Approximately 100 audits. Ensure 100% of all audits are coordinated IDSM efforts.
Strategic Plan Support	
See Section 5e	
Core Program Integration	
Education and Outreach	Provide an average of four to six events per quarter, such as workshops, presentations, displays, and staffed booths, to promote energy awareness and education.

e) Advancing Strategic Plan Goals and Objectives

A federal government partnership is a natural fit with the goals, objectives, and strategies articulated in the California Long Term Energy Efficiency Strategic Plan (Strategic Plan). Existing partnerships have demonstrated that innovation, integration, and collaboration are key to achieving the next generation of cost-effective, energy efficiency programs and the resulting reduction in greenhouse gas (GHG) emissions. Federal government sector strategies include the following:

Federal Government Partnership	
Lead by Example: Federal government commits to achieving	Where the budget allows, buildings owned by the federal government are

Federal Government Partnership	
IDSM targets in existing buildings.	benchmarked and retro-commissioned.
Develop tools and strategies to use information and behavioral strategies, commissioning, and training to reduce energy consumption in federal government buildings.	Implementing monitor based commissioning and training energy managers to continuously monitor and optimize building operational performance.
Improve utilization of plug load technologies within the commercial sector.	Leveraging the PC network software and vending machine controls to reduce commercial building plug loads.
Drive continual advances in lighting technology through research programs and design competitions.	Work with CEC's EPIC and national research institutions to pilot lighting and mechanical products on federal government-owned facilities where available.
Create demand for improved lighting and other emerging energy measures through demonstration projects, marketing efforts, and utility programs.	Piloting emerging technologies in collaboration with SCE's Emerging Technologies Program and Partnership building owners.

6. Program Implementation

a) Coordination

i. Program name

See Section 1

ii. Program delivery mechanisms

See 2015 Program Overview section above for a description of the Partnership structure and delivery mechanisms.

iii. Incentive levels

See incentive level table above.

iv. Marketing and outreach plans (*e.g.*, research, target audience, collateral, delivery mechanisms)

See Education, Outreach, and Training section above.

b) Program Delivery and Coordination

The Partnership will coordinate with the following efforts:

i. Emerging Technologies program

If opportunities allow, SCE will recommend emerging technologies to the federal government through project opportunities or the management team's introduction of technology demonstration projects.

ii. Codes and Standards program

Not Applicable.

iii. WE&T efforts

Workforce education and training (WE&T) activities are an integral part of the MBCx strategy where facilities staff are trained to maintain building optimization adding value to their skill sets and further securing their need in the workforce.

iv. Program-specific marketing and outreach efforts

See Education, Outreach, and Training section above.

v. Non-energy activities of program

Non-energy activities include providing of technical assistance the partner lacks. The program provides this kind of support as an added benefit to the partner in addition to the monetary incentives they may receive from SCE.

vi. Non-SCE Programs

The Partnership may use DR aggregators when appropriate.

vii. CEC Work on EPIC

CEC work on EPIC technology projects are introduced into the programs at the project level when opportunities arise.

viii. CEC Work on Codes and Standards

Not Applicable

ix. Non-Utility Market Initiatives

Not Applicable

c) <u>Best Practices</u>

The key to the Partnership's success is the application of best practices developed or learned from prior successful programs or other partnerships.

Type of Best Practice	Best Practice	Institutional Application(s)
Goals & Objectives	Develop and use clearly articulated objectives that are internally consistent, actionable and measurable.	Share clearly defined and obtainable goals that are developed with partner input. Track goals through bi-weekly management team meetings to ensure they are achieved.
	Develop tools to track the portfolio's performance on a continuous basis and report progress.	The detailed program plan is a living document that will facilitate continuous tracking and reporting.
Planning	Design programs within the portfolio based on sound program plans; where appropriate, utilize clearly but concisely articulated program theories.	The plan and program structure are based on sound program plans and theories.
	Conduct baseline research	Baseline research was conducted of each Partnership and the individual participating Federal facilities.
	Build feedback loops into program design and logic	The detailed program plan provides a mechanism for closely monitoring progress and making adjustments as may be needed to meet the Partnership goals and objectives.
	Maintain the flexibility to rebalance portfolio initiatives, as needed, to achieve the portfolio's goals and objectives.	
Staffing	Select highly qualified in-house staff &/or outside contractors to manage, design, implement and evaluate programs.	SCE Project Managers have been assigned to the Partnership to assure continuous open communications and implementation success. The roles and responsibilities of SCE and federal government partner and participants are clearly defined in the detailed program plan. SCE's resources will be supplemented with pre-qualified technical support contractors selected by SCE through competitive solicitations to cost-effectively provide the portfolio of technical assistance needed to support its federal government partner.
	Clearly define portfolio implementation responsibilities and clarify roles to minimize confusion.	
Integration	Leverage relationships from complementary organizations such as utilities, trade allies, and industry specialists.	Structured to leverage all resources, assets and relationships of SCE, its partners, and its participants, constituents, stakeholders, and other

Type of Best Practice	Best Practice	Institutional Application(s)
		related individuals and organizations.
Reporting and Tracking	Clearly articulate the data requirements for measuring portfolio and program success.	The detailed program plan, coupled with frequent meetings between/among SCE, its federal government partner and its members/constituents is designed to track and report Partnership progress and successes.
	Design tracking systems to support the requirements of all major users: program administrators, managers, contractors and evaluators.	

d) Innovation

Not applicable.

e) Integrated Demand Side Management

See Integration with Demand Response (DR) and Other DSM Services section above.

f) Integration Across Resource Types (energy, water, air quality, etc.)

The Partnership will include energy and non-energy resources in the IDSM audits that are conducted at federal government facilities.

g) Pilots

Not applicable

h) EM&V

See Quality Assurance and Evaluation Activities section above.

7. Diagram of Program

See Section 7 of the Institutional and Government Core PIP.

8. Logic Model

See Section 7 of the Institutional and Government Core PIP.